PRECISION

WEATHER

INSTRUMENTS

Davis Instruments

ENVIRONMENTAL INFORMATION FOR HOME & INDUSTRY

2003 CATALOG

What's New?

New Antenna Design. Improved technology equals increased transmission and reception, while shorter length gives more flexibility in locating the console.

New Station Design. Now our Vantage Pro models with fan-aspirated radiation shields are even better than ever. **See page 6.**

Wireless Leaf & Soil Moisture/Temperature Station. Sensors are sold separately, letting you build the station that matches your specific needs. **See page 7.**

Wireless and Cabled Weather Envoy. Receive data directly from a Vantage Pro integrated sensor suite—no console required! **See page 9.**

WeatherLink for Mac OS X. Now Macintosh users can enjoy the same weather data collection, analysis, and display. **See page 12.**

Davis Hat. Get 'em while you can: our new baseball-style hats, complete with Davis logo! **See Page 22.**

As always, please contact one of our customer service representatives if you have any questions. We're always glad to help.

(800) 678-3669 Toll-Free Order Line, Monday through Friday, 7:00 a.m. to 5:30 p.m. Pacific Time. Our representatives can answer most questions and assist you with your purchase.

(510) 732-9229 For callers outside the USA or Canada.

(510) 732-7814 For answers to technical questions or help with trouble-shooting.

(510) 670-0589 Fax to Customer Service or Tech Support.

www.davisnet.com Visit our web site.

sales@davisnet.com E-mail to Customer Service.

support@davisnet.com E-mail to Technical Support.

info@davisnet.com General e-mail.

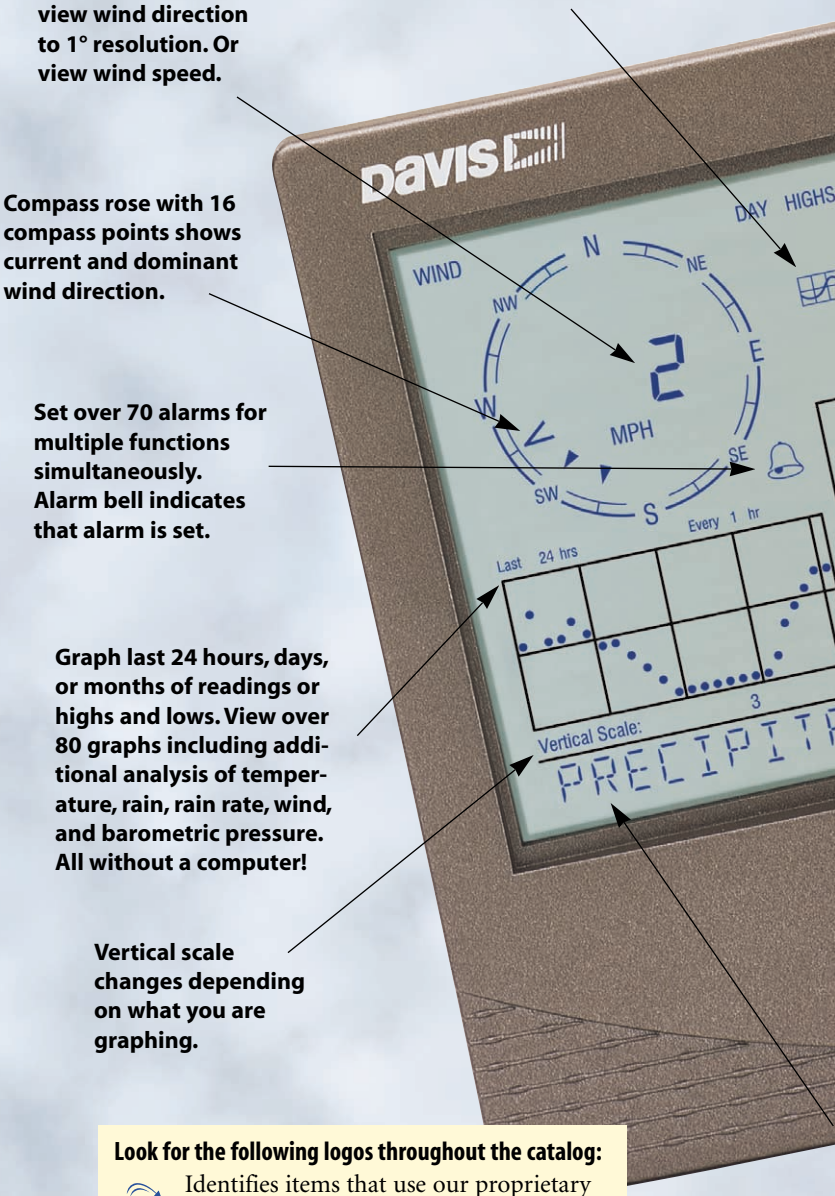
30-Day Money-Back Guarantee

If for any reason you are unsatisfied with anything purchased from us, return it within 30 days and we will gladly refund your purchase price. Shipping charges are not refundable. This guarantee does not apply to opened software packages.

Photo by Gary Oldham, Ashburn, VA

New Antenna Design!

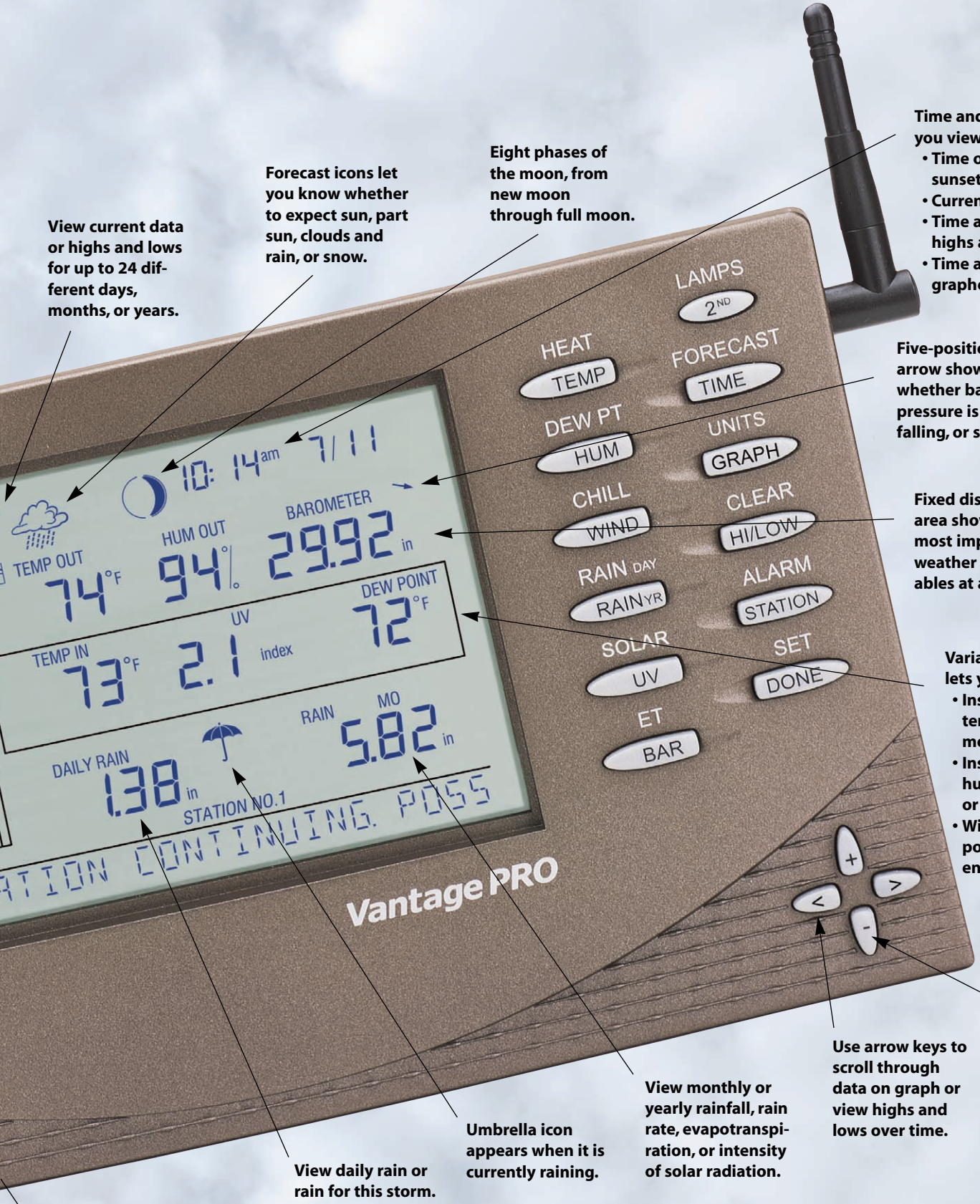
The latest in weather technology! Our Vantage Pro® weather stations offer forecasting, on-screen graphing, and much more—all on a large 3½" × 6" (90 × 150 mm) LCD display. Quick-view icons show the forecast at a glance—sunny, partly sunny, cloudy, rain or snow—while a moving ticker-tape display gives more details. Mostly clear with little temperature change? Increasing clouds and cooler with precipitation within four to six hours? Whatever the forecast, Vantage Pro will let you know. Backlit display for easy viewing. Mounts on desk, shelf, or wall. U.S. and metric units of measure.



Look for the following logos throughout the catalog:

DAVIS TALK Identifies items that use our proprietary wireless protocol. Mix and match them to create the system that suits your needs.

NIST Identifies the stations or sensors that are NIST-traceable. See page 19 for details.



View current data or highs and lows for up to 24 different days, months, or years.

Forecast icons let you know whether to expect sun, part sun, clouds and rain, or snow.

Eight phases of the moon, from new moon through full moon.

Time and date fields let you view:
- Time of sunrise and sunset
- Current time and date
- Time and date of highs and lows
- Time and date of graphed data point

Five-position trend arrow shows whether barometric pressure is rising, falling, or stable.

Fixed display area shows the most important weather variables at all times.

Variable display area lets you pick between:
- Inside or additional temperatures or soil moisture
- Inside or additional humidity, UV index, or leaf wetness
- Wind chill, dew point, or two different heat indices

Plus and minus keys simplify data entry.

Use arrow keys to scroll through data on graph or view highs and lows over time.

View monthly or yearly rainfall, rain rate, evapotranspiration, or intensity of solar radiation.

Umbrella icon appears when it is currently raining.

View daily rain or rain for this storm.

Ticker-tape display shows expanded forecast details and additional information on current conditions. Over 100 different messages!

Optional sensors or stations are required to view additional temperatures or humidities, soil moisture, UV index, solar radiation, and evapotranspiration.

Vantage Pro® weather stations are available in both wireless and cabled versions. All include our innovative integrated sensor suite, which combines our rain collector, temperature and humidity sensors, and anemometer all into one package—making setup easier than ever and improving performance and reliability. Customize your weather station by adding consoles or one or more of the special-purpose stations shown on the following pages. Up to eight wireless transmitters may report to a single console. Because regulations vary, wireless stations may not be available outside the USA.

All Vantage Pro consoles use the new wind chill formula adopted by the National Weather Service, for more accurate readings of how cold it really feels!

Flexible mounting options let you customize the installation to suit your needs.

Use our optional tripod to mount the integrated sensor suite on a rooftop . . .

. . . or in a field, with or without the console inside our Complete System Shelter.

Separate the anemometer from the rain collector to mount it on a fence post up to 40' (12 m) away. . .

. . . or even further with optional Anemometer Transmitter Kit.

Anemometer is detachable for ultimate flexibility—mount with integrated sensor suite as shown, or mount separately using the included 40' (12 m) cable.

Rain collector with self-emptying tipping bucket is exceptionally accurate. Read rainfall amounts in 0.01" increments or metric equivalent rounded to nearest 0.1 mm.

Wireless integrated sensor suite runs on solar power. Lithium battery provides backup at night and during cloudy, wintry days. (Solar panel is not included with cabled version.)

Temperature and humidity sensors are located inside the radiation shield. The shield protects the sensors from solar radiation and other sources of radiated and reflected heat.

Optional tripod makes installation even easier. Brackets at the base of legs tilt to mount on roof or uneven terrain.

Console reads in U.S. . . .

. . . or metric units of measure.

All Vantage Pro stations include:

- Console with AC-power adapter. Wireless console may also be run using three C batteries. Batteries should also be added to cabled console for back-up during power outages.
- Integrated sensor suite with rain collector, temperature and humidity sensors, and anemometer.
- 40' (12 m) anemometer cable.
- Mounting hardware.

Vantage Pro Plus stations also include:

- Solar radiation sensor.
- UV radiation sensor.
- Sensor mounting shelf.

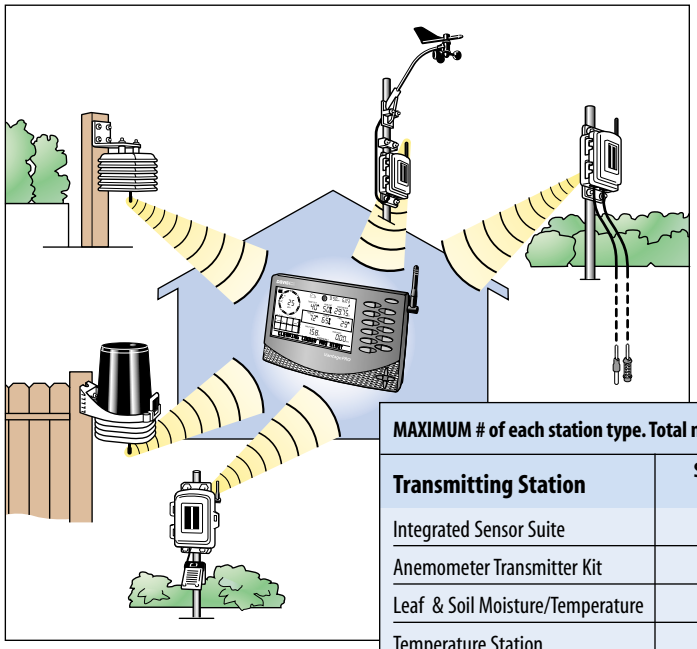
Cabled stations also include:

- 100' (30 m) cable from console to integrated sensor suite.

Wireless stations also include:

- Transmitter (in integrated sensor suite or weather-resistant shelter) and receiver (in console). Range is up to 400' (120 m) outdoors, line of sight. Typical range through walls under most conditions is 75 to 150' (23 to 46 m).
- Solar panel and lithium battery for powering transmitter.

Build your own customized weather station by adding one or more of the special-purpose stations shown on the following pages. Each Vantage Pro console/receiver can receive data from up to eight different transmitting stations. Start with one of our wireless Vantage Pro or Vantage Pro Plus stations (which include both the console and the integrated sensor suite), and add up to seven additional Temperature or Temperature/Humidity Stations. Or buy the Vantage Pro console alone (without the integrated sensor suite), and add up to eight special-purpose stations of your choice.



Each Vantage Pro console/receiver can receive data from up to eight different transmitting stations.

MAXIMUM # of each station type. Total number of stations cannot exceed 8.

Transmitting Station	Shown on Console	Logged by WeatherLink
Integrated Sensor Suite	1	1
Anemometer Transmitter Kit	1	1
Leaf & Soil Moisture/Temperature	1	1
Temperature Station	8	3*
Temperature/Humidity Station	8	2*

* WeatherLink will log a maximum of 3 Temperature Stations or 1 Temperature Station and 2 Temperature/Humidity Stations.

Use the console on a desk . . .

. . . or mount it on a wall.

See page 19 for extension cables.

Vantage Pro®

Our most popular station. Choose the wireless model for:

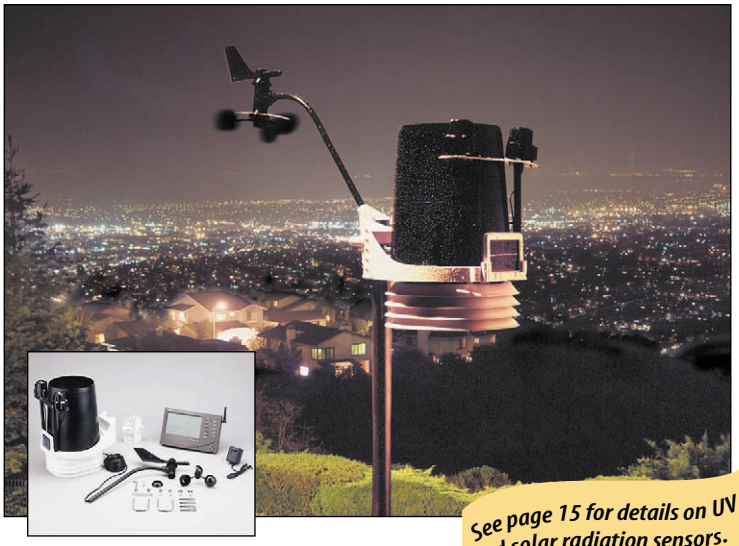
- Easiest installation.
- Ability to add additional consoles or special-purpose stations.
- Reduced risk of damage from lightning strikes.

Choose the cabled model for:

- Most economical installation.
- Field installation using our Complete System Shelter.
- Installation in areas with high RF interference.

6150 Wireless Vantage Pro $595
6150C Cabled Vantage Pro $495

DAVIS TALK NIST



See page 15 for details on UV and solar radiation sensors.

Vantage Pro® Plus

Includes all the features of Vantage Pro, plus everything you need for reading:

- UV index and dose.
- Solar radiation.
- Evapotranspiration.

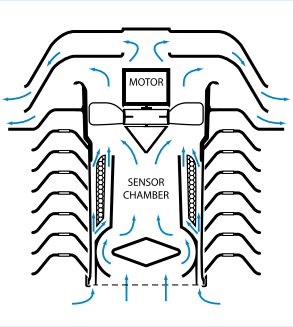
UV and solar radiation sensors are pre-installed on sensor mounting shelf. You'd pay $535 for these items if you purchased them separately. Save $135 with this special package!

6160 Wireless Vantage Pro Plus $995
6160C Cabled Vantage Pro Plus $895

DAVIS TALK NIST

When accuracy of temperature readings is critical, choose any of our Vantage Pro stations with our patented fan-aspirated radiation shield. Shield combines both active and passive aspiration to minimize the effects of radiation. Electronic components are housed in weather-resistant shelter for added protection against the elements. Wireless model runs on solar power; cabled model runs on AC power. Aspiration rate is 220 feet (67 m) per minute. At night, when the fan is being run on battery power and the effects of radiation are less, the aspiration rate for the solar-powered model is 120 feet (36 m) per minute.

For more details on our Fan-Aspirated Radiation Shield, see our Study of Radiation Shield Effectiveness on our website at www.davisnet.com/links.



Fan-Aspirated Radiation Shield

Motor-driven fan draws air through the sensor chamber and exhausts it through the top of the shield. For maximum natural cooling, triple-walled sensor chamber is shielded by flow-through plates.

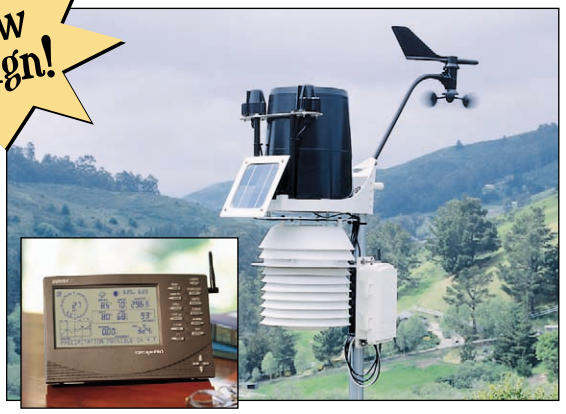
New Design!

Vantage Pro®
with Fan-Aspirated Radiation Shield

Includes all the features of the Vantage Pro stations shown on the preceding pages, plus our patented fan-aspirated radiation shield for improved accuracy of temperature readings. DAVIS TALK NIST

6151 Wireless Vantage Pro
with Solar-Powered Fan-Aspirated Radiation Shield **$795**

6151C Cabled Vantage Pro
with AC-Powered Fan-Aspirated Radiation Shield **$650**



Vantage Pro® Plus
with Fan-Aspirated Radiation Shield

Includes all the features of the Vantage Pro Plus stations shown on the preceding pages, plus our patented fan-aspirated radiation shield for improved accuracy of temperature readings. DAVIS TALK NIST

6161 Wireless Vantage Pro Plus
with Solar-Powered Fan-Aspirated Radiation Shield **$1195**

6161C Cabled Vantage Pro Plus
with AC-Powered Fan-Aspirated Radiation Shield **$1050**

Anemometer Transmitter Kit

Solar-powered kit for use with wireless Vantage Pro or Vantage Pro Plus. Allows you to locate the anemometer independently from the rain collector, up to 400' (120 m) away from the console/receiver. For longer distances, add one or more wireless repeaters. Kit includes transmitter inside weather-resistant shelter, solar panel, battery, and mounting hardware. DAVIS TALK

6330 Anemometer Transmitter Kit $135

Wireless Temperature Station

Battery-powered station includes stainless steel temperature probe with 12' (2.6 m) cable, transmitter and battery inside weather-resistant shelter, and mounting hardware. To view the data, add a wireless Vantage Pro console/receiver, Weather Echo or Echo Plus, or Weather Envoy and WeatherLink. Battery lasts up to one year under normal conditions. DAVIS TALK NIST

6370 Wireless Temperature Station $135

Wireless
Temperature/Humidity Station
with Standard Radiation Shield

Battery-powered station includes temperature and humidity sensors, transmitter, and lithium battery inside protective radiation shield. Battery lasts up to one year under normal conditions. To view the data, add a wireless Vantage Pro console/receiver, Weather Echo or Echo Plus, or Weather Envoy and WeatherLink.

DAVIS TALK NIST

6380 Wireless Temperature/Humidity Station
with Standard Radiation Shield **$235**

New Design!

Wireless
Temperature/Humidity Station
with Fan-Aspirated Radiation Shield

Solar-powered station includes temperature and humidity sensors inside fan-aspirated radiation shield. Electronic components and battery are housed inside weather-resistant shelter for added protection against the elements. To view the data, add a wireless Vantage Pro console/receiver, Weather Echo or Echo Plus, or Weather Envoy and WeatherLink.

DAVIS TALK NIST

6385 Wireless Temperature/Humidity Station
with Fan-Aspirated Radiation Shield **$395**

AC-Powered

Solar Powered

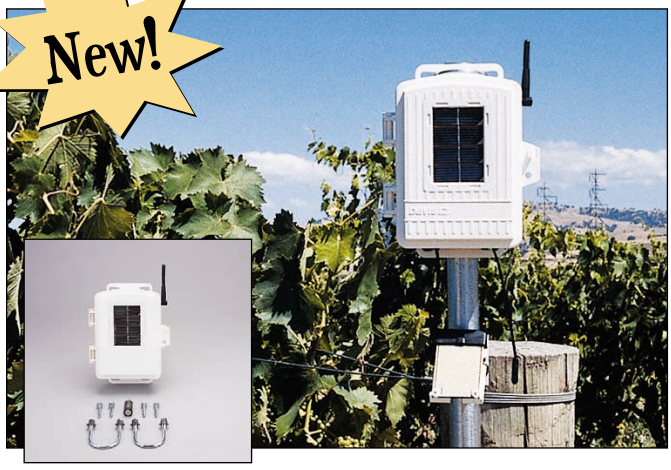
Wireless Repeaters

For distances up to one mile (1.5 km) or to improve reception in troublesome areas, add one or more wireless repeaters. Range is up to 400' (120 m) outdoors, line of sight. Typical range through walls under most conditions is 75 to 150' (23 to 46 m). Use up to eight repeaters with a single wireless station, or form a network of weather stations by linking eight repeaters to eight different wireless stations. AC-powered model includes power adapter. Solar-powered model includes solar panel, regulator circuit, and rechargeable battery.

7624 Wireless Repeater, AC-Powered $125
7625 Wireless Repeater, Solar-Powered $175

DAVIS TALK

New!



Wireless
Leaf & Soil Moisture/Temperature Station

Solar-powered station includes transmitter and battery inside weather-resistant shelter. Sensors are sold separately, letting you build the station that matches your specific needs. Add up to 2 leaf wetness sensors, 3 soil moisture sensors, and/or 3 temperature probes. To view the data, add a wireless Vantage Pro console/receiver or Weather Envoy and WeatherLink.

DAVIS TALK NIST

6343 Wireless Leaf & Soil Moisture/Temperature Station $195

Leaf Wetness Sensor

Use to monitor the level of surface moisture on foliage, with range from 0 (completely dry) to 15 (saturated). Add up to 2 sensors to a single Wireless Leaf & Soil Moisture/Temperature Station. Includes 40' (12 m) cable.

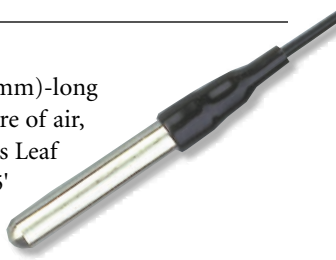
6420 Leaf Wetness Sensor $85

Soil Moisture Sensor

Watermark® soil moisture sensor uses electrical resistance to measure the moisture level of the soil. Does not require periodic maintenance during the growing season. Simply bury at the desired depth, then monitor moisture levels throughout the season. Add up to 3 sensors to a single Wireless Leaf & Soil Moisture/Temperature Station. Includes 15' (4.6 m) cable.

6440 Soil Moisture Sensor $50

Stainless Steel Temperature Probe



Multi-purpose temperature probe with 2½" (64 mm)-long stainless steel housing. Use to measure temperature of air, soil, or water. Add up 3 probes to a single Wireless Leaf & Soil Moisture/Temperature Station. Includes 15' (4.6 m) direct-burial cable.

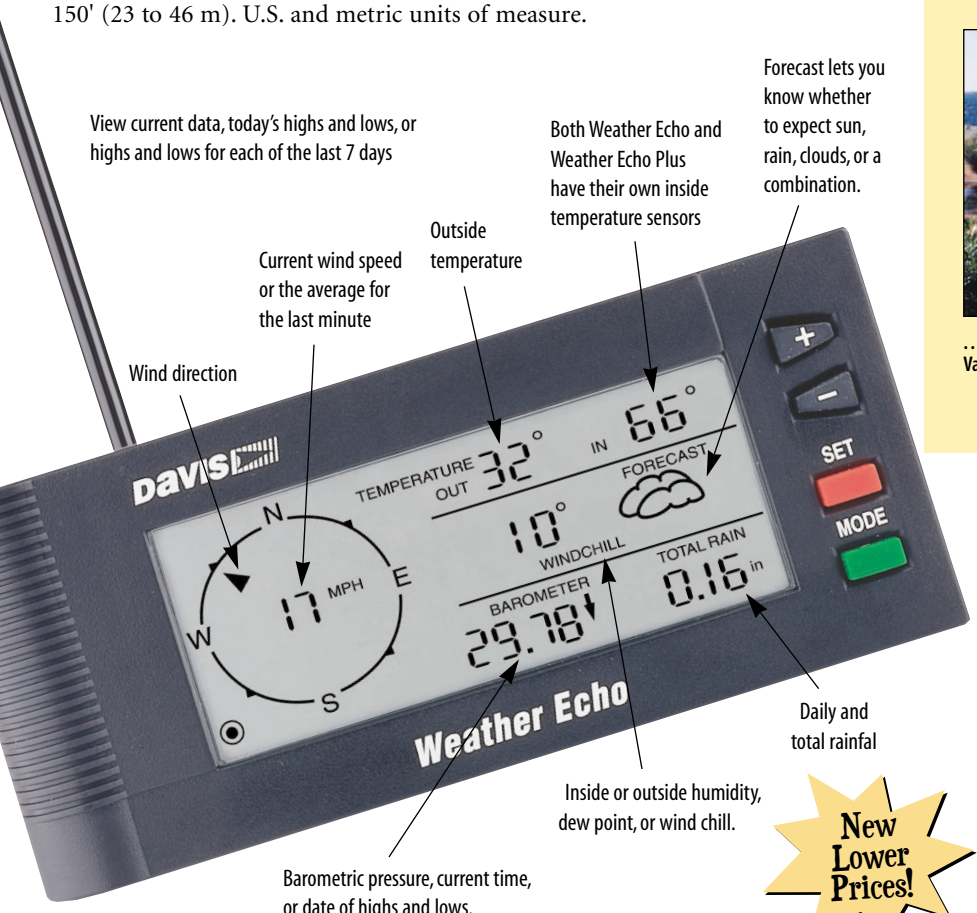
6470 Stainless Steel Temperature Probe $40

Vantage Pro Options

Wireless Weather Echo and Echo Plus receive and display data from any of our wireless transmitters. Compact design fits easily on desk, countertop, or table—even in your shirt pocket. Selectable ID code matches one of eight possible transmitting stations. Change the code to display data from a different transmitter, or add additional Weather Echos or Echo Pluses to display data from more than one transmitter. Range is up to 400' (120 m) outdoors, line of sight. Typical range through walls under most conditions is 75 to 150' (23 to 46 m). U.S. and metric units of measure.

Receive data directly from Vantage Pro integrated sensor suite . . . .

. . . or retransmit from wireless Vantage Pro console/receiver.



New Lower Prices!

Weather Echo™

Includes console with inside temperature sensor, adjustable stand for use on desk or shelf, wall-mount bracket, and three-volt lithium battery. Battery lasts up to one year under normal conditions.

7602 Weather Echo was $125 — now $95!

Weather Echo Plus™

Includes all the features of Weather Echo plus backlit display for easy viewing and inside humidity sensor. AC-power adapter allows continuous use of backlighting.

7603 Weather Echo Plus was $165 — now $135!

6320 with Standard Radiation Shield

Integrated Sensor Suite

For use with Weather Envoy and WeatherLink. Includes all the features of the Vantage Pro integrated sensor suites shown on pages 4-6.

Wireless Integrated Sensor Suite
6320 with Standard Radiation Shield **$325**
6321 with Solar-Powered Fan-Aspirated Radiation Shield **$525**

Cabled Integrated Sensor Suite
6320C with Standard Radiation Shield **$275**
6321C with AC-Powered Fan-Aspirated Radiation Shield **$430**

6326 with Solar-Powered Fan-Aspirated Shield

Integrated Sensor Suite Plus

For use with Weather Envoy and WeatherLink. Includes all the features of the Vantage Pro Plus integrated sensor suites shown on pages 4-6.

Wireless Integrated Sensor Suite Plus
6325 with Standard Radiation Shield **$725**
6326 with Solar-Powered Fan-Aspirated Radiation Shield **$925**

Cabled Integrated Sensor Suite Plus
6325C with Standard Radiation Shield **$675**
6326C with AC-Powered Fan-Aspirated Radiation Shield **$830**

Vantage Pro Console/Receiver

To view data from a wireless Vantage Pro station in additional locations, or for use with wireless Temperature, Temperature/Humidity, or Leaf & Soil Moisture/Temperature Stations. Includes all the features shown on pages 2-3.

6310 Vantage Pro Console/Receiver $295

New!

Receive data from a Vantage Pro integrated sensor suite or special-purpose station, and post it to your computer—no console required! Our Weather Envoy, when used along with a WeatherLink data logger and software package, will collect and store data from the outdoor sensors. Download the data to your computer at your convenience, then use the WeatherLink software to view current conditions at a glance, graph and chart historical data, or even create your own weather web pages.

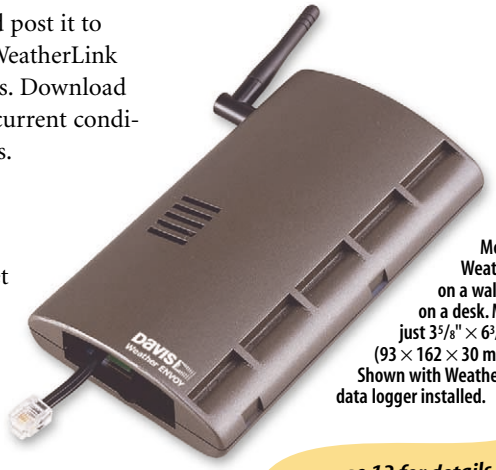
Weather Envoy™

With Weather Envoy, you can:

- Save money in situations where a console is not required. Use in your home or office, or set up a remote field station with Weather Envoy inside our Multi-Purpose Shelter.
- Use in addition to a Vantage Pro console/receiver. Put the console/receiver in the kitchen or bedroom, and Weather Envoy in your office or study, next to your computer.

Weather Envoy includes its own barometer and inside temperature and humidity sensors, just like those found on the Vantage Pro console or console/receiver. Both the wireless and cabled versions include an AC-power adapter. The wireless station may also be run using three AA batteries. Batteries will last up to six months, depending on the logging interval. Batteries should also be added to the cabled station for backup during power outages.

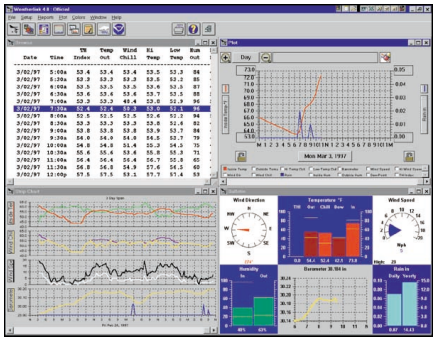
6314 Wireless Weather Envoy $195
6314C Cabled Weather Envoy $165

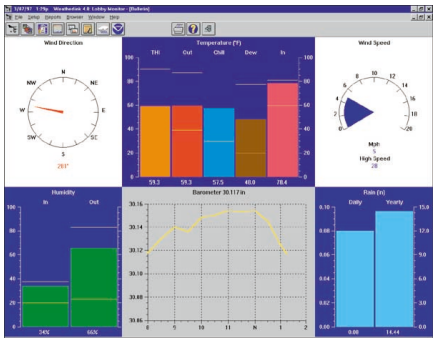


Mount Weather Envoy on a wall or use it on a desk. Measures just $3\frac{5}{8}" \times 6\frac{3}{8}" \times 1\frac{1}{8}"$ (93 × 162 × 30 mm). Shown with WeatherLink data logger installed.

See page 12 for details on WeatherLink.

Requires WeatherLink data logger and software package (not included).

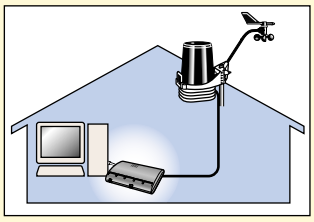




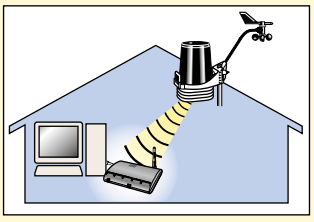
Sample WeatherLink screens. Actual screens may vary.

Receive data directly from the outdoor sensors—no console required!

Install wireless or cabled Weather Envoy in your home or office, next to your computer for easy and convenient downloading.



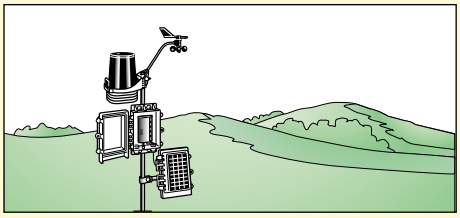
Cabled Home/Office Station



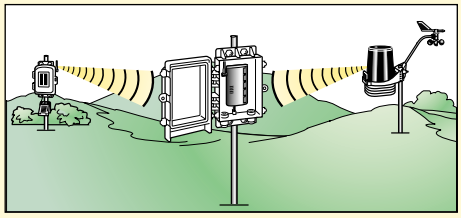
Wireless Home/Office Station

Use as a wireless or cabled field station.

Download data to your laptop whenever convenient—every day, or every 6 months. Or swap one WeatherLink data logger for another, and bring it to your home or office for downloading.

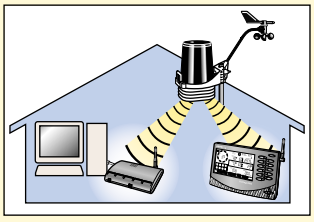


Cabled Field Station
With Multi-Purpose Shelter and 7707 Solar Power Kit. Choose the cabled station when terrain or RF interference makes wireless impractical.

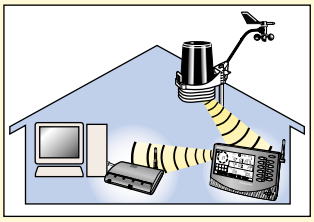


Wireless Field Station
With Multi-Purpose Shelter. Run Weather Envoy using three AA batteries (batteries last up to six months) or add our 6610 Solar Power Kit for more remote locations.

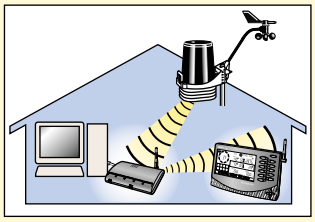
Or use in addition to a wireless Vantage Pro console/receiver.



Transmit to Both Simultaneously
Transmit data from the outdoor sensors to both the console/receiver and Weather Envoy simultaneously.



Retransmit Data to Weather Envoy
Transmit data from the outdoor sensors to the console/receiver, and retransmit it to Weather Envoy.



Retransmit from Weather Envoy
Transmit data from the outdoor sensors to Weather Envoy, and retransmit it to the console/receiver.

A cabled Weather Envoy can be used with ONE of the following:

- Cabled Integrated Sensor Suite, or
- Cabled Integrated Sensor Suite Plus

A wireless Weather Envoy can be used with ALL of the following:

- One wireless Integrated Sensor Suite or Integrated Sensor Suite Plus
- One Anemometer Transmitter Kit
- One Leaf & Soil Moisture/Temperature Station
- Three Temperature Stations or one Temperature Station and two Temperature/Humidity Stations.

GroWeather & Perception II

Our GroWeather stations provide a wealth of special-purpose information related to agricultural needs. Using the information from GroWeather, you can:

- Conserve water resources by irrigating at optimal times.
- Optimize the timing of planting, fertilizing, pesticide application, and harvesting.
- Keep an eye on the level of heat stress on workers and livestock.
- Monitor the potential fire hazard due to temperature and wind conditions along with the moisture loss of nearby vegetation.

For a customized station designed to suit your needs, add our GroWeatherLink computer interface package or any of the sensor and mounting options described on the pages to follow.

GroWeather®

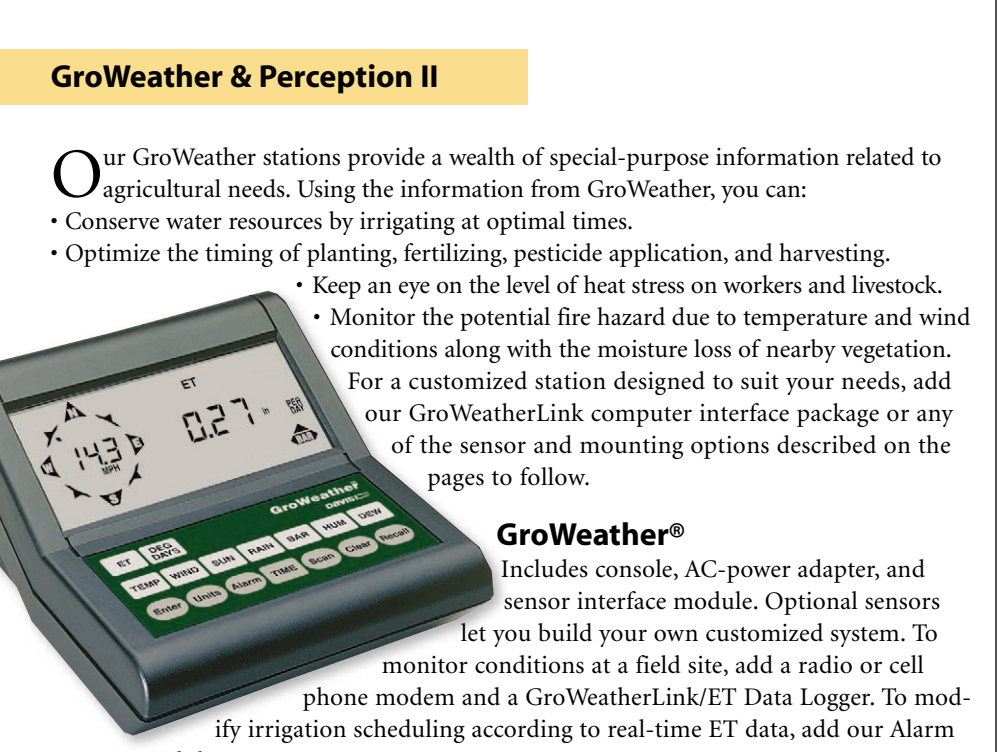
Includes console, AC-power adapter, and sensor interface module. Optional sensors let you build your own customized system. To monitor conditions at a field site, add a radio or cell phone modem and a GroWeatherLink/ET Data Logger. To modify irrigation scheduling according to real-time ET data, add our Alarm Output Module.

7450 GroWeather $395

NIST

For these special GroWeather functions:	Add these optional sensors:
Evapotranspiration	ET Data Logger, Anemometer, Solar Radiation Sensor, and Temperature/Humidity Sensor
Growing degree-days with user-settable thresholds	Temperature or Temperature/Humidity Sensor
Soil temperature in addition to air temperature *	A second Temperature Sensor or Probe
Surface moisture on foliage *	Leaf Wetness Sensor
Apparent temperature (temperature-humidity index)	Temperature/Humidity Sensor

** Soil temperature and leaf wetness use the same port. To measure both, switch from one sensor to the other as needed. Measure soil temperature to determine the proper time for planting, then switch to the Leaf Wetness Sensor for the rest of the year.*



EZ-Mount GroWeather®

Includes everything found on our basic GroWeather, plus ET data logger and all optional sensors. Sensors are pre-assembled on a galvanized steel mounting pole. Radiation shield protects temperature/humidity sensor from solar radiation and other sources of radiated and reflected heat. Weather-resistant shelter protects the sensor interface module from the elements. Locate the console inside the shelter, or run the included 100' (30 m) cable to locate the console indoors. See page 16 for optional Solar Power Kit.

NIST

7450EZ EZ-Mount GroWeather $1395

Includes 0.01" Rain Collector. Add the suffix M for 0.2 mm Rain Collector.

Alarm Output Module

To send signals to automatically start or stop external devices such as irrigation systems, heaters, or fans, add our Alarm Output Module. The Alarm Output Module can directly control devices such as irrigation controllers and thermostats. To switch power to heaters, motors, or other high-power equipment, you will need to add electrical relays (not available from Davis Instruments). For complete details, ask for a copy of our supplement on the Alarm Output Module.

7736 Alarm Output Module $195

By adding the Alarm Output Module to GroWeather you can:

- Select up to four alarm conditions for output.
- Select high and low alarms for the same weather parameter.
- Select alarms from two different weather parameters.

By adding GroWeatherLink you can also:

- Turn remote devices on or off from your keyboard.
- Write your own software program to turn devices on or off.
- Switch power to a radio on and off to conserve energy.

Perception II®

An indoor weather station requiring no installation—just plug it in using the included AC-power adapter. Use to monitor your wine cellar, greenhouse, or other climate-dependent area. Measures temperature, humidity, and barometric pressure. So accurate, it's even used by automobile racers to tune their carburetors for current air density conditions. Backlit display for easy viewing.

7400 Perception II $150

NIST

Our Weather Wizard III and Weather Monitor II offer sophisticated, professional quality for home, business, or scientific use. Add WeatherLink for detailed, long-term analysis using your PC, and you'll have a powerful computer weather station at a surprisingly affordable price.

See pages 14–15 for details on optional sensors.

Weather Monitor II®

A full-featured weather station. Basic model includes barometric pressure, inside and outside temperature, inside humidity, wind speed and direction, and wind chill. With the complete station, you'll also get outside humidity, dew point, and daily and accumulated rainfall. You'd pay $200 for the outside humidity sensor and rain collector if purchased separately. Save $100 with our Complete Weather Monitor II!

NIST

7440 Weather Monitor II $295

7440CS Complete Weather Monitor II $395
Includes 0.01" rain collector. Add the suffix M for 0.2 mm rain collector.

See page 19 for extension cables.

Choose the station that suits your needs	Perception II	Weather Wizard III	Complete Weather Wizard III	Weather Monitor II	Complete Weather Monitor II	GroWeather	EZ-Mount GroWeather
Barometric Pressure	•			•	•	•	•
Inside Temperature	•	•	•	•	•		
Outside Temperature		•	•	•	•	Optional	•
Soil or Water Temperature						Optional	•
Wind Direction		•	•	•	•	Optional	•
Wind Speed		•	•	•	•	Optional	•
Wind Chill		•	•	•	•	Optional	•
Wind Run						Optional	•
Rainfall		Optional	•	Optional	•	Optional	•
Inside Humidity	•			•	•		
Outside Humidity				Optional	•	Optional	•
Dew Point				Optional	•	Optional	•
Temperature-Humidity Index						Optional	•
Evapotranspiration						Optional	•
Growing Degree-Days						Optional	•
Leaf Wetness						Optional	•
Solar Radiation Intensity						Optional	•
Solar Energy						Optional	•

Weather Wizard III®

The most-requested features at an economical price. Basic model includes inside and outside temperature, wind speed and direction, and wind chill. With the complete station, you'll also get daily and accumulated rainfall. You'd pay $75 for the rain collector if purchased separately. Save $20 with our Complete Weather Wizard III!

NIST

7425 Weather Wizard III $195

7425CS Complete Weather Wizard III $250
Includes 0.01" rain collector. Add the suffix M for 0.2 mm rain collector.

Protected Junction Box

Provides upgraded protection against the electrical disturbances that can come through sensor cables, including radio frequency interference, electrostatic discharges, and voltage surges. Includes two 16' (5 m) ground wires. For use with Weather Monitor II or Weather Wizard III only. For GroWeather, equivalent protection is already provided by the sensor interface module.

7740 Protected Junction Box $65

All stations include the following features:

- Time in 12- or 24-hour format and date.
- U.S. and metric units of measure.
- Highs and lows.
- Sequential scan and display of readings.
- Alarms for selected functions.
- Calibration of some functions for increased accuracy under difficult conditions.

All stations include the following components:

- Console with reversible base for use on desk, shelf, or wall.
- Backlighting of LCD display for easy viewing (except Weather Wizard III).
- AC-power adapter with battery backup (battery not included).
- Quick and easy plug-in cable connections using modular RJ connectors like those found on your telephone.

Wizard & Monitor stations also include:

- Junction box with 8' (2.4 m) cable to connect sensor cables to console.

GroWeather stations also include:

- Sensor interface module with 16' (5 m) ground wire and 8' (2.4 m) cable to connect sensor cables to console. Provides increased protection against radio frequency interference, electrostatic discharges, and voltage surges.

For the ultimate in weather monitoring, add WeatherLink to any of our weather stations. The data logger fits neatly into the weather station console or Weather Envoy, storing weather data even when it's not connected to your PC.

See page 9 for details on NEW Weather Envoy.

All Versions of WeatherLink® include:

Data Logger

Data Storage & Transfer Features

- Choose a storage interval of 1, 5, 10, 15, 30, 60, or 120 minutes.
- Store up to six months worth of data before downloading, depending on the chosen storage interval. (Up to four months for Perception II, Weather Wizard III, or Weather Monitor II; up to 85 days for GroWeather.)
- Download manually whenever you like, or set the station to download automatically at the same time every day.

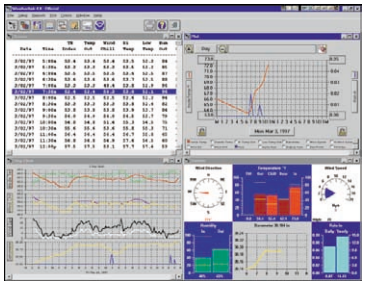
Charts, Graphs & Reports

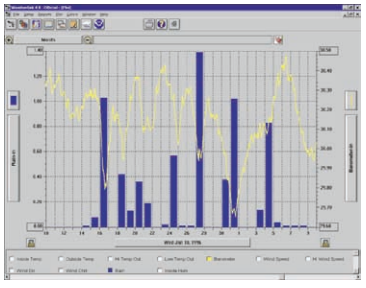
- See current conditions at a glance on the instant weather bulletin.
- Graph data on an hourly, daily, weekly, or yearly basis.
- Generate "Weather Watcher" reports in NOAA National Climatic Data Center format.
- Export data to most popular spreadsheet, database, and word processing programs.

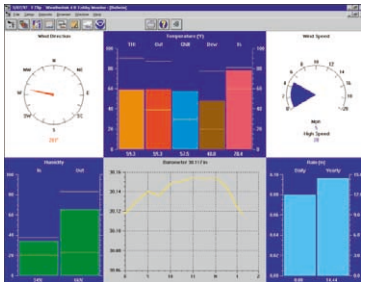
Multiple Stations & Computers

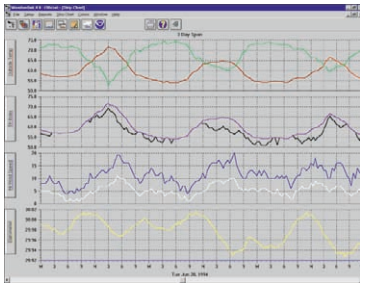
- Track multiple weather stations on the same computer using one WeatherLink for each station.
- View data from the same weather station on multiple computers using one Extra User License Kit for each computer. Kit includes license, manual, and software.

Actual screens may vary.









With WeatherLink for Vantage Pro you also get:

Special Weather Web Site Functions*

- Post current and historical weather conditions to your web site or LAN.
- Create weather web pages with our included HTML templates, or design your own.
- Add bar graphs, line graphs, text lines, or scrolling ticker tape displays.
- Upload other files, such as images from a webcam, along with your weather data.

* PC version only. Mac version allows you to upload weather summary and NOAA reports.

APRS Weather Reporting

- Participate in NOAA's Citizen Weather Observers Program by submitting data from your weather station over the Internet.

Special Energy Monitoring Functions

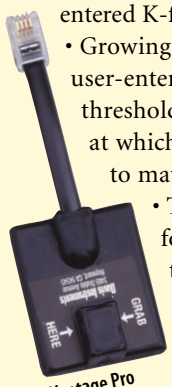
- Fuel-Oil Demand Reports, with assumed heating degree-day values to account for baseline fuel-oil usage.
- Heating & Cooling Degree Days
- Solar Energy in Langleys

Special Health Monitoring Functions

- Estimate of sunburn risk for each skin type based on current UV index.

Special Agricultural & Turf Management Functions

- Evapotranspiration, with starting and ending date and user-entered K-factor.
- Growing Degree-Days, with unlimited number of user-entered names of pest or crops, upper and lower thresholds in °F or °C, and number of degree-days at which the pest is expected to emerge or the crop to mature.
- Temperature-Humidity Hours, with up to four user-entered names of pest or disease, temperature and humidity thresholds, and number of temperature-humidity hours at which the pest is expected to emerge.
- Hours of bright sunshine above user-defined solar radiation threshold.
- Chilling Requirement
- Leaf Wetness Hours
- Soil Temperature Hours



Vantage Pro Data Logger

Some functions require the use of optional sensors. Special agricultural and turf management functions are also available on GroWeatherLink.

On our web site, you'll find links to stations as far apart as Caracas, Venezuela; Tjörn, Sweden; and Keio, Japan. Check them out at: www.davisnet.com/links.

New! Mac OS X Versions!

Match your weather station and computer to one of these versions of WeatherLink.

For Windows	For Mac	Windows versions require Windows 95/98/2000 or NT4.0, at least 5MB free hard disk space, 4MB RAM, and one free serial port. Mac versions require Mac OS X v 10.1 or above and USB serial adapter.	Price	Wireless Vantage Pro 6150, 6151, 6160, and 6161	Wireless Console/Receiver 6310	Wireless Weather Envoy 6314	Cabled Vantage Pro 6150C, 6151C, 6160C, and 6161C	Cabled Weather Envoy 6314C	Perception II 7400	Weather Wizard III 7425 and 7425CS	Weather Monitor II 7440 and 7440CS	GroWeather 7450 and 7450EZ
6510C	6520C	**WeatherLink for Vantage Pro**	$165	•	•	•	•	•				
6510X	6520X	**Extra User License Kit** for WeatherLink for Vantage Pro	25	•	•	•	•	•				
7862	7855	**WeatherLink for Perception, Wizard, or Monitor**	165						•	•	•	
7862X	7855X	**Extra User License Kit** for WeatherLink for Perception, Wizard, or Monitor	25						•	•	•	
7863		**Language Disk,** specify French, German, Japanese, Portuguese, or Spanish	5						•	•	•	
7871H		**GroWeatherLink/ET Data Logger** (included with 7450EZ)	195									•
7871S		**GroWeatherLink Software** English-Language Version	100									•
7871PS		**GroWeatherLink Software** Portuguese/Spanish Version	100									•
7871X		**Extra User License Kit** for GroWeatherLink	25									•

Clyde Royle of Grover Beach, California, e-mails the highs and lows each day to his local KSBY TV station.

All versions include:

- Software on CD (for Vantage Pro) or 2½" disk (all other WeatherLinks)
- Data logger (sold separately for GroWeatherLink).
- 8' (2.4 m) cable to connect the data logger to your computer.

GroWeatherLink also includes:

- Isolator with 40' (12 m) cable for protection against ground offsets and static charges.

WeatherLink Toolbox

Be alerted by phone or pager whenever weather conditions approach critical. With WeatherLink Toolbox, you'll get all the weather web site features described on the previous page, plus these special pager and telephone alert features:

- Send current conditions, alarm notifications, or both.
- Receive alerts 24 hours a day, 7 days a week, or only on the times ands days you choose.
- Enter as many telephones, numeric pagers, or alphanumeric pagers as you like.

Pagers will receive an alarm code or short message; phones will receive an alarm tone. Because systems vary, the pager/phone alert feature may not function outside the USA. For use with 7862 WeatherLink or 7871 GroWeatherLink only.

7802 WeatherLink Toolbox $45

Short-Range Modem Pair

For transmission of data from a WeatherLink data logger over twisted-pair cable. Use for distances up to four miles (6.4 km) over 22-gauge (0.3 mm^2) cable or up to seven miles (11 km) over 19-gauge (0.7 mm^2) cable. Adapter is included; cable is not. Mac users require additional adapter. Not for use with Vantage Pro.

7875 Short-Range Modem Pair $270
7869 Mac Adapter for 7875 $15

Link Isolator Kit

For upgraded protection against electrical disturbances, install the Link Isolator between the data logger and your computer. Includes 40' (12 m) cable and power adapter. For use with Perception II, Weather Wizard III, or Weather Monitor II only. With other versions of WeatherLink, equivalent protection is already provided.

7764 Link Isolator Kit $55

Telephone Modem Adapter

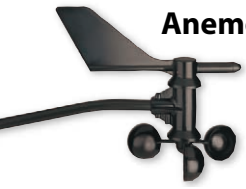
For transmission of data from any of our WeatherLink data loggers using a modem.

Telephone Modem Adapter
6533 for Vantage Pro **$7**
7870 for all other stations **$7**

Radio Communication

To access data from remote weather stations without running wires. Choose spread spectrum for distances up to 7 miles (11 km), UHF radio for distances up to 25 miles (40 km), or cellular phone for virtually unlimited range. For complete details, ask for our catalog supplement, *Radio Communication Options*.

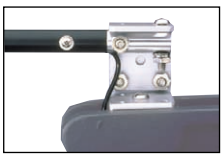
Sensor Options



Anemometer

Includes both wind speed and wind direction sensors. Rugged components stand up to hurricane-force winds, yet are sensitive to the lightest breeze. Wind-tunnel tested to speeds in excess of 170 miles per hour. Sealed stainless steel ball bearings for long life. Comes complete with mounting hardware.

7911 Anemometer for GroWeather **$120**
Includes 40' (12 m) cable. Use Standard 4-Conductor Extension Cable. Maximum cable length is 250' (76 m) from anemometer to sensor interface module.
7876-008 Cable, 8' (2.4 m) $10
7876-040 Cable, 40' (12 m) $18
7876-100 Cable, 100' (30 m) $40
7876-200 Cable, 200' (60 m) $70



Top mount

Side mount

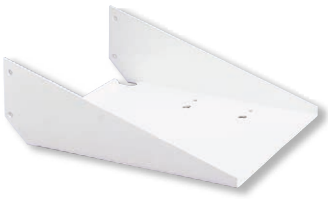
Anemometer Mast Mount

Used for special mounting situations such as sailboat mastheads. Not required for most installations. Brackets attach to virtually any surface—vertical or horizontal, curved or flat—and allow adjustment to level.
7890 Anemometer Mast Mount $16

Rain Collector

Designed to meet the guidelines of the World Meteorological Organization, our self-emptying tipping-bucket design is exceptionally accurate. Choose 0.01" or 0.2 mm increments.

7852 Rain Collector, 0.01" for Wizard, Monitor, or GroWeather **$75**
Add the suffix M for 0.2 mm Rain Collector. Includes 40' (12 m) cable. Use Standard 4-Conductor Extension Cable. Maximum cable length is 900' (270 m) from rain collector to Wizard or Monitor console (including junction box cable) or GroWeather sensor interface module.
7876-008 Cable, 8' (2.4 m) $10
7876-040 Cable, 40' (12 m) $18
7876-100 Cable, 100' (30 m) $40
7876-200 Cable, 200' (60 m) $70



Rain Collector Shelf

Provides a horizontal surface for mounting the Rain Collector. May be used with Sensor Mounting Arm or mounted on other structures or surfaces. Aluminum shelf is white powder coated for added durability.

7704 Rain Collector Shelf $35

Rain Collector Heater

For use in cold climates to measure freezing rain or the moisture content of snowfall. Requires access to AC power; may not be run using a solar power kit. Includes 24-watt, 24-volt heater with thermal cut-off switch, control unit, insulating reflective blanket, and AC-power adapter.

7720 Rain Collector Heater $160
Includes 50' (15 m) cable. Use Shielded 2-Twisted Pair Extension Cable. Maximum cable length is 120' (36 m).
7884-050 Cable, 50' (15 m) $28
7884-100 Cable, 100' (30 m) $52

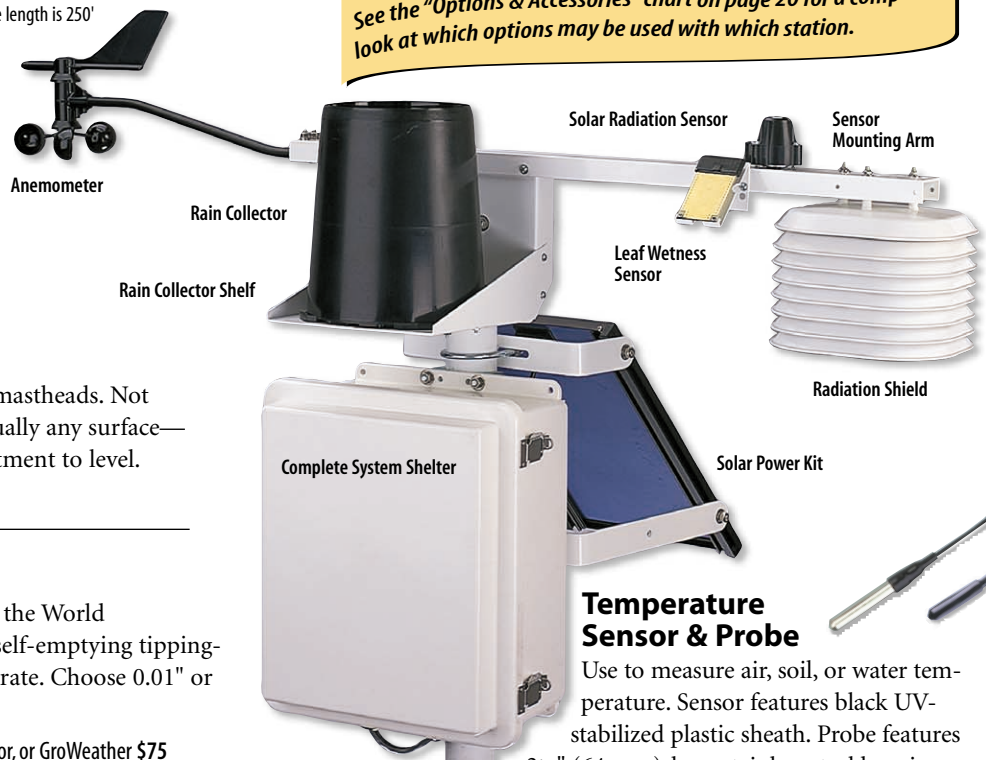
Leaf Wetness Sensor

To indicate the presence of surface moisture on foliage with range from 0 to 15.

6420 Leaf Wetness Sensor for Leaf & Soil Moisture/Temperature Station **$85**
Includes 40' (12 m) cable. Extension cables may not be used with this station.

7846 Leaf Wetness Sensor for GroWeather **$85**
Includes 40' (12 m) cable. Use Standard 6-Conductor Extension Cable. Maximum cable length is 125' (38 m) from sensor to sensor interface module.
7878-040 Cable, 40' (12 m) $22

See the "Options & Accessories" chart on page 20 for a complete look at which options may be used with which station.



Temperature Sensor & Probe

Use to measure air, soil, or water temperature. Sensor features black UV-stabilized plastic sheath. Probe features 2½" (64 mm)-long stainless steel housing.

6470 Temperature Probe for Leaf & Soil Moisture/Temperature Station **$40**
Includes 25' (7.6 m) cable. Extension cables may not be used with this station.

7817 Temperature Sensor for Wizard, Monitor, or GroWeather **$18**

7818 Temperature Probe for Wizard, Monitor, or GroWeather **$30**
Both include 25'(7.6 m) cable. Use Standard 4-Conductor Extension Cable. Maximum cable length is 300' (90 m) from sensor to console (including junction box or sensor interface module cable).
7876-008 Cable, 8' (2.4 m) $10
7876-100 Cable, 100' (30 m) $40
7876-040 Cable, 40' (12 m) $18

Radiation Shield

The most effective passive shelter available. Protects temperature sensor from solar radiation and other sources of radiated and reflected heat. Multi-plate construction for maximum airflow. Assembly required.

7714 Radiation Shield $65
for Wizard, Monitor, or GroWeather, or for Wireless Temperature Station or Leaf & Soil Moisture/Temperature Station

Solar Radiation Sensor

To measure solar radiation and solar energy. Diffuser element and housing are carefully designed for accurate cosine response. Silicon photo diode provides good match to solar spectrum. Two-piece housing minimizes radiation heating, allows convection cooling of the sensor, and prevents the trapping of water or dust.

6450 Solar Radiation Sensor for Vantage Pro **$160**
Includes 3' (0.9 m) cable. Use Standard 4-Conductor Extension Cable. Maximum cable length is 125' (38 m) from sensor to integrated sensor suite.

7821 Solar Radiation Sensor for GroWeather **$160**
Includes 40' (12 m) cable. Use Standard 4-Conductor Extension Cable. Maximum cable length is 125' (38 m) from sensor to sensor interface module.
7876-008 Cable, 8' (2.4 m) $10 7876-040 Cable, 40' (12 m) $18 7876-100 Cable, 100' (30 m) $40

UV Sensor

Measures the sunburning portion of the UV spectrum. Allows you to display UV index, dose rate, and daily and accumulated dose. Multi-layer filter provides a spectral response that closely matches the Erythema Action Spectrum. Diffuser provides excellent cosine response. Two-piece housing minimizes radiation heating, allows convection cooling of the sensor, and prevents the trapping of water or dust.

6490 UV Sensor for Vantage Pro **$350**
Includes 3' (0.9 m) cable. Use Standard 4-Conductor Extension Cable. Maximum cable length is 125' (38 m) from sensor to integrated sensor suite.
7876-008 Cable, 8' (2.4 m) $10 7876-040 Cable, 40' (12 m) $18 7876-100 Cable, 100' (30 m) $40

Sensor Mounting Shelf

For mounting Vantage Pro UV and/or solar radiation sensors. Powder-coated aluminum shelf with anodized aluminum posts and stainless steel hardware attaches easily to outside of integrated sensor suite.

6672 Sensor Mounting Shelf $25

Temperature/Humidity Sensor

Measures outside temperature, relative humidity, and dew point. When used with Weather Monitor II, it replaces the external temperature sensor included with the station.

7859 Temperature/Humidity Sensor for Monitor or GroWeather **$125**
Includes 40' (12 m) cable. Use Standard 6-Conductor Extension Cable. Maximum cable length is 125' (38 m) from sensor to console (including junction box or sensor interface module cable).
7878-040 Cable, 40' (12 m) $22

Complete System Shelter

Complete System Shelter with console, sensor interface module, short-range modem, and alarm output module.

To locate your station console and other components outside, at a field or remote location. Weather-resistant NEMA 4X enclosure provides protection from the elements for any of the following:

- Vantage Pro console or console/receiver with WeatherLink data logger.
- Weather Wizard III or Weather Monitor II console with WeatherLink data logger, protected junction box, radio communication option (short-range modem, spread spectrum radio modem, or cellular phone modem), regulator circuit from solar power kit, and 7.0-amp-hour battery.
- GroWeather console with GroWeatherLink data logger, sensor interface module, alarm output module, radio communication option (short-range modem, spread spectrum radio modem, or cellular phone modem), regulator circuit from solar power kit, and 7.0-amp-hour battery.

Measures 15½" × 7¾" × 13½" (395 × 195 × 345 mm).

7724 Complete System Shelter $185

Multi-Purpose Shelter

Multi-Purpose Shelter with alarm output module and sensor interface module.

Use to shelter any of the following sub-systems:

- Weather Envoy with WeatherLink data logger.
- Weather Wizard III or Weather Monitor II console with WeatherLink data logger, protected junction box, link isolator, and short-range modem.
- GroWeather console with GroWeatherLink data logger and short-range modem.
- GroWeather sensor interface module with Alarm Output Module.
- Spread spectrum or UHF radio modem with timer.

Measures 3¾" × 9½" × 12½" (95 × 240 × 320 mm).

7728 Multi-Purpose Shelter $75

Shelter Heaters

For use in cold climates. Use if you expect temperatures below 0°F (-18°C) or if condensation is a problem. Requires access to AC power; may not be run using a solar power kit. Includes 24-watt, 24-volt heater with thermal cut-off switch, control unit, insulating reflective blanket, and AC-power adapter.

7726 Complete System Shelter Heater with 50' (15 m) cable **$170**
7730 Multi-Purpose Shelter Heater with 50' (15 m) cable **$165**
Use Shielded 2-Twisted Pair Extension Cable. Maximum cable length is 120' (36 m).
7884-050 Cable, 50' (15 m) $28 7884-100 Cable, 100' (30 m) $52

Sensor Mounting Arm

For use with Weather Wizard III, Weather Monitor II, or GroWeather. Aluminum arm is white powder coated for added durability. Includes mounting hardware and ground wire.

7702 Sensor Mounting Arm $65

Installation Options

Solar Power Kit
for Wireless Vantage Pro or Wireless Weather Envoy

Powers the wireless console/receiver or Weather Envoy. (Outdoor sensors are powered by the solar panel that is included with the station.) Includes solar panel, regulator circuit, and rechargeable battery.

6610 Solar Power Kit for Wireless Vantage Pro **$95**

Solar Power Kit
for Cabled Vantage Pro, Cabled Weather Envoy, or EZ-Mount GroWeather

Powers both the console (or Weather Envoy) and the outdoor sensors. Includes solar panel, regulator circuit, and rechargeable battery. For far northern or southern latitudes or areas with limited sunlight, add the Add-On Solar Panel.

7707 Solar Power Kit for Cabled Vantage Pro or EZ-Mount GroWeather **$195**
7705 Add-On Solar Panel $150

Solar Power Kit
for Standard Weather Wizard III, Weather Monitor II, or GroWeather

Powers both the console and the outdoor sensors. Generates enough power to run the station under most low-light conditions. After one hour of bright sunlight, will supply sufficient energy to run the station for 16 hours in total darkness. Dual-bracket design provides stability in winds up to 140 mph (225 km/hr). Includes 10-watt solar panel, regulator circuit, and battery mounting bracket. Use with our 7.0-Amp Hour Battery or other battery of your choice.

7708 Solar Power Kit for Standard Weather Wizard III, Weather Monitor II, or GroWeather **$295**

7.0-Amp-Hour Battery

For use with our 7708 Solar Power Kit. When fully charged, the battery will run the system for eight days at 68°F (20°C) or five days at -4°F (-20°C).

7711 7.0-Amp-Hour Battery $30

Car/Boat/RV Lighter Cord

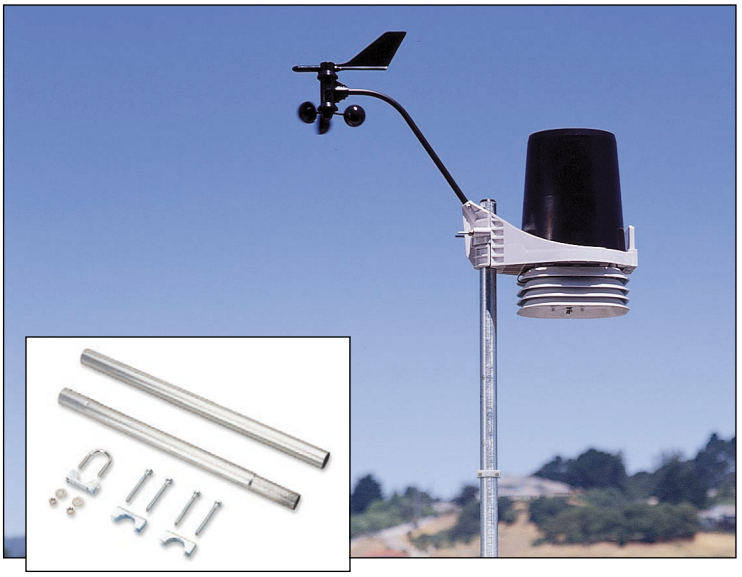
For powering any of our weather station consoles or console/receivers. Plugs directly into the cigarette lighter in your car, truck, RV, or boat. Replaces the AC-power adapter that is included with the station. Includes 8' (2.4 m) cable.

6604 Car/Boat/RV Lighter Cord for Vantage Pro **$10**
7873 Car/Boat/RV Lighter Cord for Wizard, Monitor, or GroWeather **$10**

Mounting Tripod

Optional tripod makes installation even easier. Brackets at the base of legs tilt to mount on roof or uneven terrain. Made of galvanized steel. Includes two 36 3/8" (0.92 m)-long poles, which may be used separately or together to make a single 69 3/4" (1.77 m)-long pole.

7716 Mounting Tripod $50



Mounting Pole Kit

Optional Mounting Pole Kit includes two galvanized steel poles, connector, and mounting hardware. Poles measure 19 1/2" (0.50 m) and 21" (0.53 m) long. Assemble the two together to make a single 37 1/2" (0.95 m) long pole. Outside diameter is 15/16" (33 mm).

7717 Mounting Pole Kit $25

Weather Forecasting Card

Discusses the use of wind direction, barometric pressure, and cloud type in predicting the weather. Includes full list of radio weather stations for official broadcasts, plus key information on storm warnings, hurricane avoidance, navigating in fog and other hazardous conditions, and more. Weatherproof high-strength plastic, full color both sides. Punched for binder or bulkhead mounting. Dimensions: 8 1/2" × 11" (216 × 279 mm).

131 Weather Forecasting Card $9.95

Surge Protector

For upgraded protection against lightning-induced power surges, power-cross conditions, and ground potential rises, use Surge Protectors with any of our cabled weather stations. For installation on cable runs between:

- Sensor and junction box or sensor interface module.
- Console and junction box or sensor interface module.

Use one surge protector for every two wires. See the chart below to determine the number of surge protectors needed for your installation. Stripping of wires is required. For additional protection options, see our Protected Junction Box (page 11) and Link Isolator Kit (page 13).

7767 Surge Protector $14

Use 1 Surge Protector for every 2 Wires

Product #	Description	Number of Wires	Number of Surge Protectors
n/a	Junction Box or Sensor Interface Module	8	4
7911	Anemometer	4	2
7846	Leaf Wetness Sensor	3	1.5
7852	Rain Collector	2	1
7821	Solar Radiation Sensor	3	1.5
7817	Temperature Sensor	2	1
7818	Temperature, Stainless Steel Probe	2	1
7859	Temperature/Humidity Sensor	5	2.5

Surge-Protector Shelters

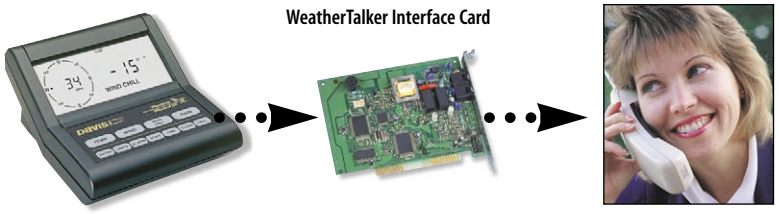
Weather-resistant shelters for Surge Protectors (sold separately). Small shelter houses up to two Surge Protectors; large shelter houses up to twelve. Includes ground wire. Small shelter measures 3½" × 5¾" × 2¼" (90 × 145 × 55 mm). Large shelter measures 3¾" × 9¼" × 12½" (90 × 235 × 320 mm)

7768 Small Shelter $18
7769 Large Shelter $75

Grounding Kit

When suitable ground is not available, use our Grounding Kit with any of the following: sensor interface module, Protected Junction Box, Sensor Mounting Arm, Complete System Shelter, Multi-Purpose Shelter, or Surge Protector Shelters. Includes two 32"-long × ⅝"-diameter (81 cm × 16 mm) copper-clad grounding rods, coupler for joining the two rods together, and wire clamp.

7780 Grounding Kit $30



WeatherTalker™

Instant personalized weather reports—as close as the nearest phone! With WeatherTalker, you can:

- Create custom weather reports using the data from your weather station.
- Enter primary and secondary phone numbers to be called when an alarm occurs.
- Add personal announcements or promotional messages.
- Connect to music-on-hold features of most multi-line phone systems. Requires one WeatherTalker for each line; maximum three. Because systems vary, WeatherTalker may not be compatible outside the USA.

Weather station requirements:

- Perception II, Weather Wizard III, or Weather Monitor II.
- WeatherLink

PC requirements:

- DOS 6.0 or higher.
- For one WeatherTalker: 286 or better with 512K RAM.
- For two: 386 or better with 2MB RAM.
- For three: 486 or better with 3MB RAM.
- One 8- or 16-bit expansion slot
- 20MB of free hard disk space
- One unused com port in addition to serial port required by WeatherLink

7861 WeatherTalker

Price Reduced! Was $395, now only $195!
To hear a live demonstration, dial (510) 782-2834

Hand-Held Wind Speed Indicators

For instantaneous wind speed readings, where you need them, when you need them. Rugged, high-impact plastic with corrosion-resistant components, protective vinyl case, and attached wrist lanyard.

Wind Wizard™

Reads wind speed in miles/hour, meters/second, and Beaufort. Readout dial is supported on sapphire jewel bearings and steadied by a rare-earth magnetic dampening system. Folding handle quickly and securely latches into place. No batteries needed. Dimensions: 3⅝" × 2⅞" × 1" (92 × 73 × 25 mm) with handle folded. Weight: 2.5 oz (71 g).

281 Wind Wizard $47.95

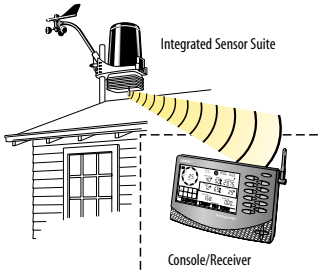
Turbo Meter™

Reads wind speed in miles/hour, knots, feet/minute, or meters/second. Turbine suspended on sapphire jewel bearings responds to the lightest of winds. Three-digit display offers excellent viewing contrast in bright sunlight or at night. Requires three AAA alkaline batteries (not included). Dimensions: 4⅝" × 2⅝" × 1⅛" (118 × 66 × 30 mm). Weight: 3 oz (85 g) not including batteries.

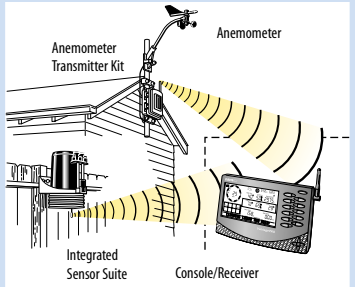
271 Turbo Meter $165

Installation Diagrams

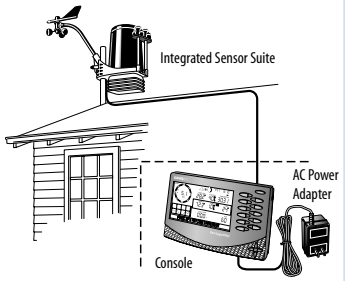
Wireless Vantage Pro



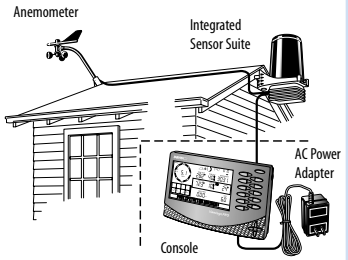
Anemometer Transmitter Kit



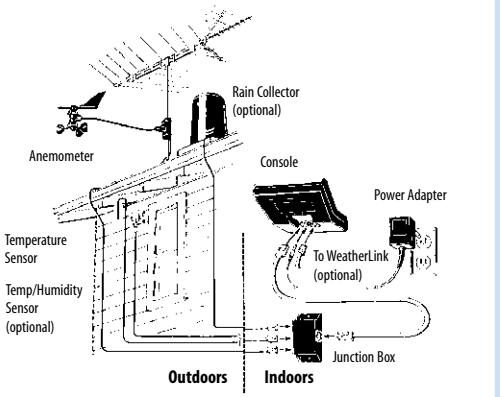
Cabled Vantage Pro Plus



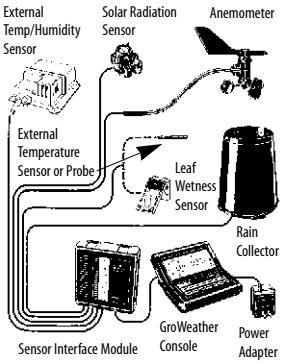
Remote Anemometer



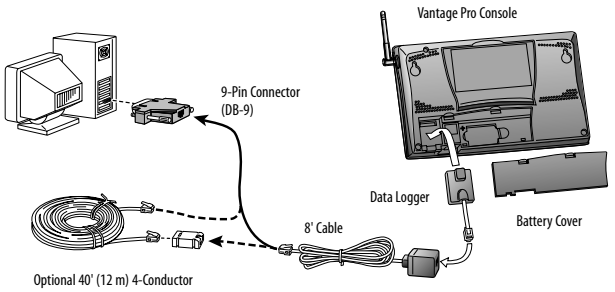
Weather Monitor II Installation



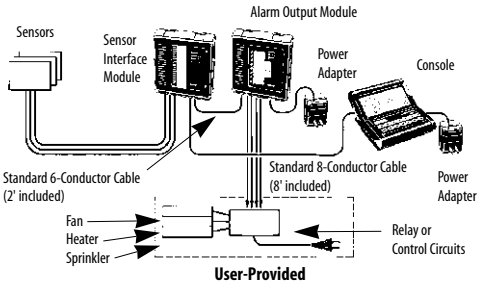
Comprehensive GroWeather System



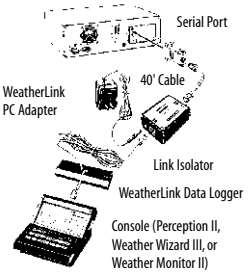
WeatherLink for Vantage Pro



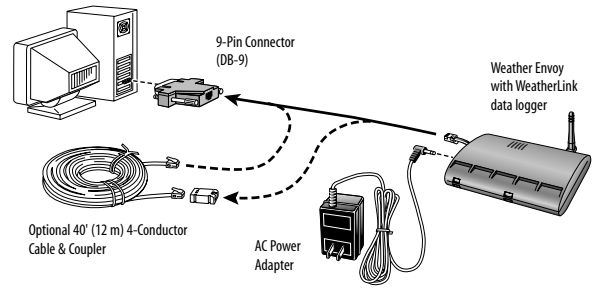
Alarm Output Module at Sensor Interface Module



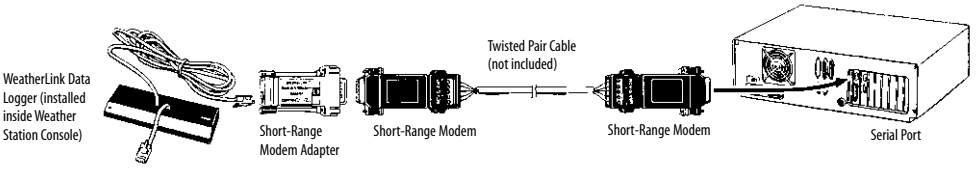
Link Isolator Kit Installation



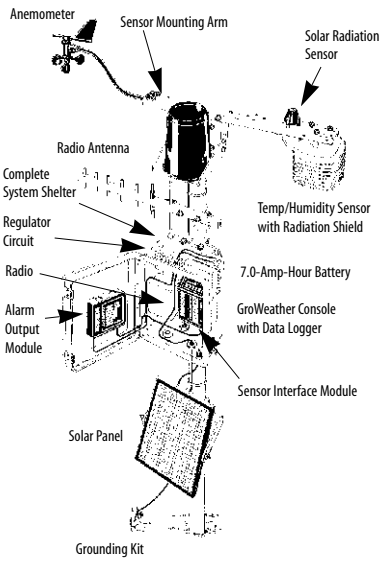
Wireless Weather Envoy



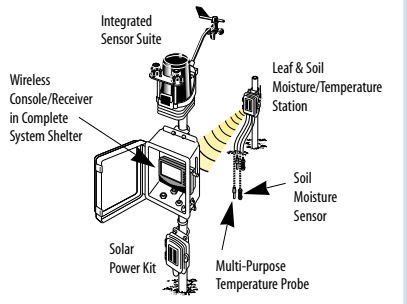
WeatherLink with Short-Range Modem Pair



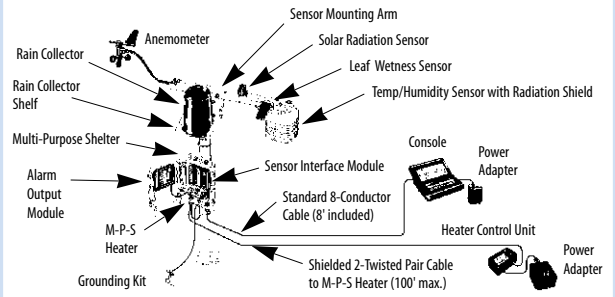
Field System with Solar Power, Radio, and Antenna

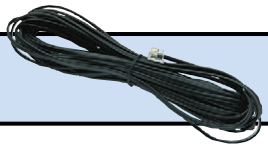


Field Station with Solar Power and Soil Moisture



Field Interface Installation





Extension Cables

Cable Connections

Standard 4- and 6-conductor cables include waterproof coupler kits for joining two cables together, indoors or out. To join standard 8-conductor cables, use an 8-pin cable coupler (for indoor use only). Shielded cables include waterproof crimp-type splice connectors. All cables may also be joined using Surge Protectors.

Anemometer

For Wizard and Monitor, maximum wind speed reading decreases as length of cable from anemometer to console (including junction box cable) increases. At 140' (42 m), maximum speed is 175 mph (78 m/s). At 240' (73 m), maximum is 140 mph (62 m/s). At 340' (103 m), maximum is 70 mph (31 m/s). The accuracy of the reading below the maximum is not affected. For GroWeather, maximum cable length is 250' (76 m) from anemometer to sensor interface module. Maximum speed is 175 mph (78 m/s) throughout this length.

	Included Cable Length		Maximum Cable Length	7876-008 Standard 4-Conductor, 8' (2.4 m) $10	7876-040 Standard 4-Conductor, 40' (12 m) $18	7876-100 Standard 4-Conductor, 100' (30 m) $40	7876-200 Standard 4-Conductor, 200' (61 m) $70	7878-040 Standard 6-Conductor, 40' (12 m) $22	7880-025 Standard 8-Conductor, 25' (7.5 m) $15	7880-050 Standard 8-Conductor, 50' (15 m) $25	7880-100 Standard 8-Conductor, 100' (30 m) $45	7959 Eight-Pin Cable Coupler $5	7884-050 Shielded 2-Twisted Pair, 50' (15 m) $28	7884-100 Shielded 2-Twisted Pair, 100' (30 m) $52
Vantage Pro	Wireless Vantage Pro	40' (12 m)	540' (165 m) from anemometer to integrated sensor suite.	●	●	●	●							
	Cabled Vantage Pro	40' (12 m)	540' (165 m) from anemometer to integrated sensor suite.	●	●	●	●							
		100' (30 m)	1000' (300 m) from console to integrated sensor suite.	●	●	●	●							
	WeatherLink for Vantage Pro	8' (2.5 m)	48' (14.6 m) from data logger to computer.	●	●									
	Solar Radiation Sensor	3' (0.9 m)	125' (38 m) from solar radiation sensor to integrated sensor suite.	●	●	●								
	UV Sensor	3' (0.9 m)	125' (38 m) from solar radiation sensor to integrated sensor suite.	●	●	●								
Wizard, Monitor, & GroWeather	Weather Wizard III	8' (2.4 m)	125' (38 m) from junction box to console.						●	●	●	●		
	Weather Monitor II	8' (2.4 m)	125' (38 m) from junction box to console.						●	●	●	●		
	Protected Junction Box	None	200' (60 m) from Protected Junction Box to console.						●	●	●	●		
	Remote Display Unit	8' (2.4 m)	200' (60 m) from Protected Junction Box to console.						●	●	●	●		
	WeatherLink Windows or Mac	8' (2.4 m)	50' (15 m) from data logger to computer.	●	●									
	GroWeather	8' (2.4 m)	125' (38 m) from sensor interface module to console.						●	●	●	●		
	Anemometer	40' (12 m)	See note above.	●	●	●	●							
	Leaf Wetness	40' (12 m)	125' (38 m) from sensor to sensor interface module.					●						
	Rain Collector	40' (12 m)	Wizard or Monitor: 900' (270 m) from rain collector to console, including cable from junction box to console. GroWeather: 900' (270 m) from rain collector to sensor interface module.	●	●	●	●							
	Solar Radiation	40' (12 m)	125' (38 m) from sensor to sensor interface module.	●	●	●	●							
	Temperature Sensor	25' (7.6 m)	300' (91 m) from sensor to console, including cable from junction box or sensor interface module to console.	●	●	●	●							
	Temperature Probe	25' (7.6 m)	300' (91 m) from sensor to console, including cable from junction box or sensor interface module to console.	●	●	●	●							
	Temp/Humidity Sensor	40' (12 m)	300' (91 m) from sensor to console, including cable from junction box or sensor interface module to console.					●						
Heaters	Rain Collector Heater	50' (15 m)	120' (36 m) from power unit to AC-power adapter. Requires terminal block.										●	●
	Complete System Shelter Heater	50' (15 m)	120' (36 m) from power unit to AC-power adapter. Requires terminal block.										●	●
	Multi-Purpose Shelter Heater	50' (15 m)	120' (36 m) from power unit to AC-power adapter. Requires terminal block.										●	●

Anemometers are wind-tunnel tested in our California factory.

NIST-Traceable Sensors

In the USA, the National Institute of Standards & Technology (NIST) develops and maintains the standards of measurement to which all others are ultimately traced. Numerous calibrations, tests, and measurement assurance programs are delivered directly to about 10,000 companies. From these companies, NIST-traceable intermediate service providers are the next link in a network that joins together the makers and users of precision instruments. Davis Instruments is proud to participate in this network. Each of our weather stations is carefully manufactured in our California factory. For those users who require NIST-traceability, certification and recertification of new and previously owned sensors is now available. For a NIST-certified Vantage Pro add $200. Call, fax, or e-mail us for complete details.

Station Dimensions		Inches	Millimeters
Vantage Pro	Console	$9\frac{1}{2} \times 6 \times 1\frac{1}{2}$	240 × 150 × 38
	LCD Display	$6 \times 3\frac{1}{2}$	150 × 90
	ISS: Anemometer Side	$14\frac{1}{2} \times 5\frac{1}{4} \times 17\frac{1}{2}$	370 × 130 × 445
	ISS: Rain Collector Side with Standard Radiation Shield	$11 \times 9 \times 13\frac{1}{2}$	280 × 230 × 340
	ISS: Rain Collector Side with Fan-Aspirated Radiation Shield	13 × 9 × 20	330 × 230 × 510
	Leaf & Soil Moisture/ Temperature Station	$5 \times 2\frac{3}{8} \times 7$	130 × 60 × 180
	Temperature Station	$5 \times 2\frac{3}{8} \times 7$	130 × 60 × 180
	Temperature/Humidity Station with Std Radiation Shield	$8\frac{1}{4} \times 7\frac{1}{4} \times 7\frac{3}{4}$	210 × 185 × 197
	Temp/Humidity Station with Fan-Aspirated Radiation Shield	$9\frac{1}{2} \times 11\frac{3}{4} \times 14$	240 × 300 × 355
Wiz, Mon, Gro	Console	$5\frac{1}{4} \times 5\frac{7}{8} \times 3$	133 × 150 × 76
	LCD Display	$4\frac{3}{4} \times 1\frac{3}{4}$	108 × 45
	Junction Box (Wizard & Monitor)	$3\frac{1}{4} \times 1\frac{7}{8} \times \frac{7}{8}$	82 × 48 × 22
	Sensor Interface Module (GroWeather)	$5\frac{3}{4} \times 5\frac{3}{4} \times 1\frac{1}{4}$	145 × 145 × 32
	EZ-Mount Sensor Array	$18 \times 9\frac{1}{2} \times 33\frac{1}{2}$	457 × 240 × 850

Weather Club E-Newsletter

Interested in learning more about our stations? Sign up for our Weather Club e-newsletter at www.davisnet.com/links. It's chock full of interesting stories, tips on maintenance and installation, and timely reminders. And it's delivered right to your PC every month.

Estimated Current Draw & Battery Life*	Current Draw in milliamperes		Backup Battery Life in Days		80-Amp Car Battery Life at normal temperatures
	lights off	lights on	without data logger	with data logger	
Wireless Vantage Pro Console/Receiver	0.6	80	365	365	> 5 years
Cabled Vantage Pro Console & Sensors	8	88	27	27	14 mo.
Perception II	7	127	2.5	1.0	6 to 9 mo.
Weather Wizard III	6	n/a	3.0	1.5	6 to 9 mo.
Weather Monitor II	7	127	2.5	1.0	6 to 9 mo.
GroWeather	22	140	0.7	0.7	6 to 9 mo

* Actual battery life will vary depending on station setup and usage.

Options & Accessories

		Wireless								Cabled				Cabled							Dimensions	
		6150 Vantage Pro $595	6151 with Fan-Aspirated Rad Shield $795	6160 Vantage Pro Plus $995	6161 with Fan-Aspirated Rad Shield $1195	6343 Leaf & Soil Moisture/Temp $195	6370 Temperature Station $135	6380 Temperature/Humidity Station $235	6385 with Fan-Aspirated Rad Shield $395	6150C Vantage Pro $495	6151C w/ Fan-Aspirated Rad Shield $650	6160C Vantage Pro Plus $895	6161C w/ Fan-Aspirated Rad Shield $1050	7400 Perception II $150	7425 Weather Wizard III $195	7425CS Complete Weather Wizard III $250	7440 Weather Monitor II $295	7440CS Complete Weather Monitor II $395	7450 GroWeather $395	7450EZ EZ-Mount GroWeather $1395	Inches	Millimeters
Wireless	6310 Vantage Pro Console/Receiver $295	•	•	•	•	•	•	•	•												$9^1/_2 \times 6 \times 1^1/_2$	240 × 150 × 38
	6314 Wireless Weather Envoy $195	•	•	•	•	•	•	•	•												$5 \times 2^3/_8 \times 7$	130 x 60 × 180
	6330 Anemometer Transmitter Kit $135	•	•	•	•																$3^5/_8 \times 6^3/_8 \times 1^1/_8$	93 x 162 × 30
	7602 Weather Echo $95	•	•	•	•	•	•	•	•												$5^1/_4 \times 2^1/_4 \times {}^7/_8$	132 × 57 × 22
	7603 Weather Echo Plus $135	•	•	•	•	•	•	•	•												$5^1/_4 \times 2^1/_4 \times {}^7/_8$	132 × 57 × 22
	7624 Wireless Repeater, AC Power $125	•	•	•	•	•	•	•	•												$5 \times 2^3/_8 \times 7$	130 x 60 × 180
	7625 Wireless Repeater, Solar Power $175	•	•	•	•	•	•	•	•												$5 \times 2^3/_8 \times 7$	130 x 60 × 180
Sensors	7911 Anemometer $120																		•		$18^1/_2 \times 7^1/_2 \times 2^1/_4$	470 × 190 × 120
	6420 Leaf Wetness Sensor $85					•															$2 \times 3^1/_2 \times {}^1/_2$	50 × 90 × 13
	7846 Leaf Wetness Sensor $85																		•		$2 \times 3^1/_2 \times {}^1/_2$	50 × 90 × 13
	7852 Rain Collector II $75														•		•		•		$8^3/_4$ diameter × $9^1/_2$	165 diameter × 240
	6440 Soil Moisture Sensor $50					•															$^7/_8$ diameter × 2	22 diameter × 50
	6450 Solar Radiation Sensor $160	•	•							•	•										$2 \times 2^3/_4 \times 2^1/_4$	50 × 70 × 57
	7821 Solar Radiation Sensor $160																		•		$2 \times 2^3/_4 \times 2^1/_4$	50 × 70 × 57
	6470 Temperature Probe, Stainless $40					•															$^1/_4$ diameter × 2	6 diameter × 50
	7818 Temperature Probe, Stainless $30														•	•	•	•	•		$^1/_4$ diameter × 2	6 diameter × 50
	7817 Temperature Sensor $18																		•		$^1/_4$ diameter × $1^1/_4$	6 diameter × 32
	7859 Temperature/Humidity Sensor $125																•		•		$3^1/_2 \times 3^1/_4 \times 1^1/_4$	90 × 83 × 38
	6490 UV Sensor $350	•	•							•	•										$2 \times 2^3/_4 \times 2^1/_4$	50 × 70 × 57
Computer Interface	6510C WeatherLink for Vantage Pro for PC $165	•	•	•	•	•	•	•	•	•	•	•	•								$1^1/_8 \times 1^3/_8 \times {}^5/_8$	30 x 35 × 15
	6520C WeatherLink for Vantage Pro for Mac $165	•	•	•	•	•	•	•	•	•	•	•	•								$1^1/_8 \times 1^3/_8 \times {}^5/_8$	30 x 35 × 15
	7862 WeatherLink for Windows $165													•	•	•	•	•			$4^1/_4 \times 1^3/_4 \times {}^1/_2$	108 × 45 × 13
	7855 WeatherLink for Mac OS X $165													•	•	•	•	•			$4^1/_4 \times 1^3/_4 \times {}^1/_2$	108 × 45 × 13
	7871H GroWeatherLink/ET Data Logger $195																		•		$4^1/_4 \times 1^3/_4 \times {}^1/_2$	108 × 45 × 13
	7871S GroWeatherLink Software $100																		•	•	n/a	n/a
	7802 WeatherLink Toolbox $45													•	•	•	•	•	•	•	n/a	n/a
	7861 WeatherTalker $195													•	•	•	•	•			$5^1/_2 \times 4^1/_4 \times {}^3/_4$	140 × 108 × 20
	7764 Link Isolator Kit $55													•	•	•	•	•			$3^1/_2 \times 2^1/_2 \times 1$	90 × 65 × 25
	6533 Telephone Modem Adapter $7	•	•	•	•	•	•	•	•	•	•	•	•								$1^3/_4 \times 2^1/_4 \times {}^1/_2$	45 × 57 × 13
	7870 Telephone Modem Adapter $7													•	•	•	•	•	•	•	$1^3/_4 \times 2^1/_4 \times {}^1/_2$	45 × 57 × 13
	7875 Short-Range Modem Pair $270													•	•	•	•	•	•	•	$2^1/_2 \times 1^1/_4 \times {}^3/_4$	65 × 32 × 20
Power	6604 Car/Boat/RV Lighter Cord $10	•	•	•	•					•	•	•	•								$^3/_4$ diameter × $3^1/_4$	20 diameter × 83
	7873 Car/Boat/RV Lighter Cord $10													•	•	•	•	•	•	•	$^3/_4$ diameter × $3^1/_4$	20 diameter × 83
	6610 Solar Power Kit $95	•	•	•	•																$5 \times 2^3/_8 \times 7$	130 x 60 × 180
	7707 Solar Power Kit $195									•	•	•	•							•	$3^3/_4 \times 9^1/_2 \times 12^1/_2$	95 × 240 × 318
	7708 Solar Power Kit $295													•	•	•	•	•	•		$10^1/_2 \times 16^1/_2 \times 1$	267 × 420 × 25
Installation & Mounting Options	7736 Alarm Output Module $195																		•	•	$5^3/_4 \times 5^3/_4 \times 1^1/_4$	145 × 145 × 32
	7890 Anemometer Mast Mount $16														•	•	•	•	•	•	$3 \times 1^1/_2 \times 1^3/_4$	75 × 38 × 45
	7780 Grounding Kit $30														•	•	•	•	•	•	$^5/_8$ diameter × 64	16 diameter x 1625
	7716 Mounting Tripod $50	•	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•	30 × 33 × 52	762 × 838 × 1320
	7717 Mounting Pole Kit $25	•	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•	$^{15}/_{16}$ diameter × $37^1/_2$	33 diameter x 950
	7740 Protected Junction Box $65														•	•	•	•			$5^3/_4 \times 5^3/_4 \times 1^1/_4$	145 × 145 × 32
	7714 Radiation Shield $65					•	•								•	•	•	•	•		$7^1/_2 \times 8^1/_2 \times 6$	190 × 215 × 152
	7704 Rain Collector Shelf $35														•	•	•	•	•		$10 \times 8^3/_4 \times 3^1/_2$	255 × 222 × 90
	7720 Rain Collector Heater $160	•	•	•	•					•	•	•	•		•	•	•	•	•	•	$4 \times 2^1/_4 \times {}^3/_4$	102 × 57 × 20
	6672 Sensor Mounting Shelf $25	•	•							•	•										$2 \times 9 \times {}^3/_{32}$	50 x 228 × 2
	7702 Sensor Mounting Arm $65														•	•	•	•	•	•	$32 \times 2 \times 7^3/_4$	813 × 50 × 197
	7767 Surge Protector $14									•	•	•	•		•	•	•	•	•	•	$1^1/_2 \times 1^1/_2 \times 1^1/_4$	38 × 38 × 32
	7768 Surge Protector Shelter, Small $18									•	•	•	•		•	•	•	•	•	•	$3^1/_2 \times 5^3/_4 \times 2^1/_4$	88 × 145 × 55
	7769 Surge Protector Shelter, Large $75									•	•	•	•		•	•	•	•	•	•	$3^3/_4 \times 9^1/_4 \times 12^1/_2$	95 × 235 × 318
	7724 Complete System Shelter $185	•	•	•	•					•	•	•	•	•	•	•	•	•	•	•	$15^1/_2 \times 7^3/_4 \times 13^1/_2$	395 × 197 × 343
	7726 Complete System Shelter Heater $170	•	•	•	•					•	•	•	•	•	•	•	•	•	•	•	$4 \times 2^1/_4 \times {}^3/_4$	102 × 57 × 20
	7728 Multi-Purpose Shelter $75													•	•	•	•	•	•	•	$15^1/_2 \times 7^3/_4 \times 13^1/_2$	395 × 197 × 343
	7730 Multi-Purpose Shelter Heater $165													•	•	•	•	•	•	•	$3^3/_4 \times 9^1/_4 \times 12^1/_2$	95 × 235 × 318

Sensor Accuracy, Resolution, and Range

Function		Vantage Pro	Perception II	Weather Wizard III	Weather Monitor II	GroWeather	U.S.A. Units			Metric Units		
							Resolution	Range	Accuracy ±	Resolution	Range	Accuracy ±
Agricultural	Evapotranspiration	●				●	0.01"	Day: to 99.99" Month: to 199.99" Year: to 199.99"	5%	Rounded to nearest 0.1 mm from measurement in 0.01" increments	Day: to 999.9 mm Month: to 1999.9 mm Year: to 1999.9 mm	5%
	Growing Degree-Days	❍				●	Day: 0.1 D-Day Avg: 0.1 D-Day Total: 1 D-Day	Day: to 400 D-Days Avg: to 400 D-Days Total: to 19,999 D-Days		Day: 0.1 D-Day Avg: 0.1 D-Day Total: 1 D-Day	Day: to 220 D-Days Avg: to 220 D-Days Total: to 19,999 D-Days	
	Leaf Wetness	●				●	1	0 to 15	0.5	1	0 to 15	0.5
	Soil Moisture	●					1 cb	0 to 200 cb		1 cb	0 to 200 cb	
Barometric Pressure	Barometric Pressure (Elevation range: -1000' to +12,500'; -300 to +3800 m)	✔	✔		✔	✔	0.01" Hg	26" to 32" Hg	0.03" Hg	0.1 mm Hg	660 to 810 mm Hg	0.8 mm Hg
		✔	✔		✔					0.1 mb	880 to 1080 mb	1.0 mb
		✔				✔				0.1 hPa	880 to 1080 hPa	1.0 hPa
	Three-Hour Trend	✔					Slow ≥ 0.2" Hg Rapid ≥ 0.6" Hg	5-Position Arrow		Slow ≥ 0.5 mm (0.7 mb) Rapid ≥ 1.5 mm (2 mb)	5-Position Arrow	
	One-Hour Trend		✔		✔	✔	Change ≥ 0.2" Hg	3-Position Arrow		Change ≥ 5 mm (0.7 mb, 0.7 hPa)	3-Position Arrow	
Humidity	Inside Humidity	✔	✔		✔		1%	10% to 90%	5%	1%	10% to 90%	5%
	Outside Humidity	✔			●	●	1%	0% to 100%	3%	1%	0% to 100%	3%
	Dew Point	✔			●	●	1°F	−105° to +130°F	3°F	1°C	−76° to +54°C	1.5°C
Rainfall	Rainfall	✔					0.01"	Day: 0 to 99.99" Storm: 0 to 99.99" Month: 0 to 199.99" Year: 0 to 199.99"	4%	Rounded to nearest 0.1 mm from measurement in 0.01" increments. At or above 2000 mm, rounded to 1 mm.	Day: 0 to 9999 mm Storm: 0 to 9999 mm Month: 0 to 19,999 mm Year: 0 to 19,999 mm	4%
				●	●	●	0.01"	Day: 0 to 40.95" Total: 0 to 99.99"	4%	0.2 mm	Day: 0 to 819 mm Total: 0 to 9999 mm	4%
	Rate of Rainfall	✔				●	0.01"	0 to 99.99"/hr	5%	Rounded to 0.1 mm	0 to 1999.9 mm/hr	5%
Solar & UV	Solar Radiation	●				●	1 W/m²	0 to 1800 W/m²	5%	1 W/m²	0 to 1800 W/m²	5%
	Solar Energy	❍				●	Console: 0.1 Ly	Console: 1999.9 Ly	5%	PC: 0.1 J/cm²	PC: 1999.9 J/cm²	5%
	UV Dose	●					0.1 MEDs	0 to 199 MEDs	5%	0.1 MEDs	0 to 199 MEDs	5%
	UV Index	●					0.1	0 to 16	5%	0.1	0 to 16	5%
Temperature	Inside Temperature	✔	✔	✔	✔		0.1°F	32° to 140°F	1°F	0.1°C	0° to 60°C	0.5°C
	Outside Temperature	✔		✔	✔	●	0.1°F	−40° to +150°F	1°F	0.1°C	−40° to +65°C	0.5°C
	Soil or Water Temperature	●				●	1°F	−40° to +150°F	1°F	1°C	−40° to +65°C	0.5°C
	Outside Temp-Hum Index	✔				●	1°F	−40° to +135°F	3°F	1°C	−40° to +57°C	1.5°C
	Temp-Hum-Sun-Wind Index	●					1°F	−90° to +135°F	4°F	1°C	−68° to +64°C	2°C
	Wind Chill	✔		✔	✔	●	1°F	−110° to +130°F	2°F	1°C	−79° to +54°C	1°C
Time/Date	Time	✔	✔	✔	✔	✔	1 minute	12 hours	8 sec/mo	1 minute	24 hours	8 sec/mo
	Date	✔	✔	✔	✔	✔	month/day		8 sec/mo	day/month		8 sec/mo
	Sunrise & Sunset	✔					1 minute			1 minute		
Wind	Wind Direction	✔		✔	✔	●	1°	0° to 360°	7°	1°	0° to 360°	7°
				✔	✔		10°	0° to 360°	7°	10°	0° to 360°	7°
	Compass Rose	✔		✔	✔	●	22.5°	16 compass points	7°	22.5°	16 compass points	7°
	Wind Speed	✔		✔	✔	●	1 mph 1 knot	2 to 150 mph 2 to 130 knots	5%	0.1 m/s 1 km/hr	1 to 67 m/s, 3 to 241 km/hr	5%
	Direction of High Speed	✔				●	22.5°	16 compass points	7°	22.5°	16 compass points	7°
	Wind Run					●	0.1 mile	0 to 1999.9 miles	5%	0.1 km	0 to 1999.9 km	5%

✔ Included
● Optional, shown on console
❍ Optional, requires WeatherLink

Unless listed separately, accuracy, resolution, and range are shown for Vantage Pro stations (except for Growing Degree-Days and Solar Energy, which are shown for GroWeather). The specifications for Perception II, Weather Wizard III, Weather Monitor II, and GroWeather may be somewhat different. For complete specifications, visit our website at www.davisnet.com/links.

Vantage PRO®

	BAR	HUMIDITY			RAIN			TEMPERATURE				WIND			WITH OPTIONAL SENSORS								
	Barometric Pressure	Inside Humidity	Outside Humidity	Dew Point	Rainfall Amount	Rain Storm Amount	Rain Rate	Inside Temperature	Outside Temperature	Heat Index	Wind Chill	Wind Speed	Wind Direction	Direction of High Speed	Evapotranspiration	Humidity (Extra)	Leaf Wetness	Soil Moisture	Solar Radiation	Temperature (Extra)	Temp-Hum-Sun-Wind	UV Radiation	UV MEDs
Update Interval	15 min	1 min	50 sec	10 sec	10 sec	10 sec	10 sec	1 min	10 sec	10 sec	10 sec	2½ sec	2½ sec	2½ sec	1 hour	50 sec	62½ sec	62½ sec	50 sec	10 sec	10 sec	50 sec	50 sec
CONSOLE DISPLAYS																							
Reading at end of update interval	●	●	●	●				●	●	●	●		●			●	●	●	●	●	●	●	
Total amount for the interval					●	●									●								●
Average reading for the interval												●											
High reading for the interval							●																
SET ALARMS for																							
Special Alarms	①				②	③						④			⑤								⑥
High Reading		●	●	●			●	●	●	●		●				●	●	●	●	●	●	●	
Low Reading		●	●	●				●	●		●					●	●	●		●			
DISPLAYED but not graphed																							
Current Year High	●	●	●	●				●		●						●	●	●		●			
Current Year Low	●	●	●	●				●			●					●	●	●		●			
GRAPHED & DISPLAYED for last 24 of each of the following																							
EOP: End-of-15-Minute Period Readings	●																						
EOP: End-of-Hour Period Readings	●	●	●	●				●	●	●							●	●			●		
TOTALS: 15-minute Period Totals					●																		
TOTALS: Hourly Totals					●										●								●
TOTALS: Daily Totals					●										●								●
TOTALS: Monthly Totals					●										●								
TOTALS: Storm Totals (with start & end date)						●																	
TOTALS: Yearly Totals					●										●								
AVERAGES: 10-Minute Averages												●											
AVERAGES: Hourly Averages or Dominant												●	●						●			●	
AVERAGES: Daily Averages or Dominant													●	●									
AVERAGES: Monthly Averages or Dominant													●	●									
AVERAGES: Yearly Averages														●									
HIGHS: One-Minute Highs							●																
HIGHS: Hourly Highs							●					●											
HIGHS: Daily Highs	●	●	●	●			●	●	●	●		●					●	●	●		●	●	
HIGHS: Monthly Highs	●	●	●	●			●	●	●	●		●					●	●	●		●	●	
HIGHS: Yearly Highs							●		●			●											
LOWS: Hourly Lows											●												
LOWS: Daily Lows	●	●	●	●				●	●		●						●	●					
LOWS: Monthly Lows	●	●	●	●				●	●		●							●					
LOWS: Yearly Low									●														

SPECIAL ALARMS

① **Storm Warning:** Amount of barometric pressure fall.
Storm Clearing: Amount of barometric pressure rise.

② **Flash Flood Warning:** 15-minute rainfall amount.
24-Hour Rain Alarm: 24-hour rainfall amount.

③ **Rainstorm Alarm:** Rainfall amount for current storm.

④ **10-Minute Average Wind Speed Alarm**

⑤ **Daily Evapotranspiration Amount Alarm**

⑥ **Daily UV Dose Alarm**

Update interval may vary depending on station ID and type of station. Details and specifications subject to change at any time without notice.

About Our Cover

Fifth-graders in Sacramento, California, use a Davis weather station in their science studies, taking measurements three times a day and charting and graphing them at the "Weather Watch Center."

At the Peterson **residence in the Oakland hills**, ninety mile per hour winds knocked a heavy garden bench over and tore the gate off its hinges—though conditions are usually less dramatic, as pictured here!

Researchers from Stanford University relayed data from two Davis weather stations in Antarctica to a research station 600 miles away via polar orbiting satellites. Next on the agenda: hooking the station up to an Iridium phone and adding a web cam.

Davis Hat

Now you can get your own Davis hat! Baseball-style cap is 100% cotton twill. Two-toned with washed khaki crown, dark-colored brim, and embroidered Davis logo. Self-fabric closure with brass buckle. One size fits all.

PR725 Davis Hat $12

Warranty

We warrant our products to be free of defects in material and workmanship for one year from date of original purchase. While we make every effort to carefully manufacture our products to the highest standards of quality, occasionally parts may be found to be missing, defective, or damaged. If you have a defective part, return the product to us, shipping charges prepaid. Include proof of purchase and a written explanation of the trouble. During the warranty period, we will, at our option, either repair or replace the product free of charge. This warranty does not cover damage due to improper installation or use, lightning, negligence, accident, or unauthorized service, or to incidental or consequential damages beyond the Davis products themselves. Implied warranties are limited in duration to the life of this limited warranty. Some states do not allow limitations on how long an implied warranty lasts, or the exclusion or limitation of incidental and consequential damages, so the above limitation may not apply to you. This warranty gives you specific legal rights. You may have other rights, which vary from state to state.

Details, specifications, and prices are subject to change at any time without notice.

Things to consider when
Purchasing an Electronic Weather Station

1. What weather variables are measured and recorded?

Most other stations offer barometric pressure, outside humidity and dew point, daily and yearly rainfall, wind speed and direction, wind chill, and outside temperature. Some also offer inside temperature and humidity, and a few even give you extra outside temperature readings and current rain rate. Only Vantage Pro gives you all these, plus:

- Additional Rainfall Information: 15-minute rainfall, hourly and monthly rainfall, and rainfall amounts for each of the last 24 storms.
- Additional Wind Speed Information: 10-minute average wind speed, direction of high speed, and 10-minute dominant wind direction.
- Apparent Temperature: Heat index (the combined effects of temperature and humidity) and, with the addition of a solar radiation sensor, temperature-humidity-sun-wind index.
- Optional Sensors for Solar and UV Radiation, something that's becoming more important as we become increasing aware of the dangers to health caused by excessive exposure to the sun.
- Additional Information (with optional sensors) for agricultural users: evapotranspiration, leaf wetness, soil moisture, and soil temperature.

2. How easy is it to set up ?

With most of the competing stations, you need to install each sensor separately, which adds complication and takes time and effort. Our Vantage Pro® weather stations are designed to make setup as easy as possible. The Integrated Sensor Suite is factory-assembled. Just complete a few minor assembly steps, insert the battery, and then you're ready to mount the sensors. Mount them all together using our optional tripod, or detach the anemometer to mount it separately. Flexible mounting options make it easy, either way.

3. What is the maximum transmission distance?

The wireless transmission range for most of the competing stations is generally quite limited. Although transmission range is highly variable (depending not only on the surrounding physical features of the land and structures but also on the RF interference in the area), our Vantage Pro weather stations will almost always out perform the competition. And—unlike the competition—we offer wireless repeaters should you wish to extend the range.

4. How many highs and lows are measured and recorded?

Most other stations simply give you the current readings. If highs and lows are available at all, they are usually quite limited. Only Vantage Pro gives you the highs and lows (and/or totals or average readings) for just about all available weather conditions, with the time and/or date they occurred, for the last 24 days, months, or years. No other weather station on the market even comes close. And not only can you view the data numerically, you'll also see it on Vantage Pro's on-screen graphs, giving you instantaneous visual representations of long-term trends.

5. How often is the information updated?

The Vantage Pro transmitter sends a data packet to the console every 2½ seconds. The weather conditions that are the most variable (such as wind speed and direction) are updated with each packet, while most other conditions are updated every 10 seconds. With the competition's stations, the update interval is much longer: 30 seconds, or even up to 3 minutes. This may not seem like an important distinction. But try watching the wind gust, or the rain suddenly come pouring down. It's very disconcerting to be looking out the window, seeing something happening weather-wise, and not see it reflected on the console for what seems to be an eternity.

6. How is the forecast generated?

The competition generally bases their forecasts strictly on whether barometric pressure is rising or falling. This results in none too accurate a prediction. Vantage Pro uses a sophisticated forecasting algorithm which takes into account not only barometric pressure, but also wind, rainfall, temperature, humidity, and longitude and latitude. The result? A much more accurate forecast. Not perfect, but even the guys with the satellite pictures don't always get it right!

7. How is the forecast displayed?

The competition gives their forecast by means of an icon. We have similar icons, plus over 80 different forecast messages that scroll across the bottom of the display-when you press the FORECAST key. None of the other stations have this scrolling message—it is unique to Davis. The ticker tape also gives additional information, depending on which key you press. For example, press the WIND key to display wind speed, and you'll see a message showing you the 10 minute average wind speed. If it's raining, you can press the RAIN YR key to see the last 15 minutes of rain, or RAIN DAY to see the last 24 hours of rain. And these are just a few examples! None of the competition has anything like this.

8. How much data can you graph on the screen?

With Vantage Pro, you can graph just about every weather variable, with averages and highs and lows for most, and go back in time for minutes, days, months, and years. The competition typically graphs just one variable—barometric pressure—and typically just for the last 24 hours. With all the graphs on Vantage Pro, you can do tons of analysis, even without purchasing an additional software package (although we offer one of those, too). And you'll find that the more dramatic the weather is, the more fun it is to look at the graphs. Just how windy is it, and how does it compare to the last wind storm? And how much rain did we get this month, as compared to last month?

9. Can you use the station at higher elevations?

Our stations can be used up to 12,500 feet in elevation. Many of the competing stations are limited to 6,000 feet or below. If you're lucky enough to live and work—or perhaps enjoy a vacation home—in the mountains, you'll find that our Vantage Pro weather station works just fine, no matter what elevation you're at.

10. Is there a computer interface?

If you'd like to do even more analysis, you can add our WeatherLink data logger and software package. The data logger stores data at the interval you choose (from one minute to two hours) for up to six months. You can transfer the data whenever you like, or leave your computer on to have it automatically transfer every day. The data logger uses non-volatile memory, so you won't lose the data even if you lose power. For some of the competing stations, no software package is available. And while other stations do offer a software package, they don't include a data logger—so your computer must be on and the software running at all times.

11. How many alarms are there?

Our alarms can be set for just about every weather variable, for just about any reason imaginable—over 70 alarms, in all. Like the graphs, the alarms found on the competition's stations are generally quite limited.

12. What is the accuracy, resolution, and range?

Our stations generally beat the competition's in accuracy, resolution, and range. It can be difficult to find the specs for competing stations. When we do find them, our testing shows that they are a bit, shall we say, optimistic. We are very proud of our specs, stand behind them 100%, and are proud to publish them in our catalog and on our website.

13. How many other people are using the stations?

Although our Vantage Pro stations are new, we have an installed base of thousands and thousands of happy Davis weather station users around the country and around the world. If you check out the "Weather Around the World" section on our website (www.davisnet.com/links), you'll see a listing for Norman, Oklahoma. Click on that link, and you'll go to the website for the National Weather Service's Storm Prediction Center. They're using our Weather Monitor II (a predecessor to the Vantage Pro station) to update the local "unofficial" weather conditions to their website. In addition, many Davis weather station owners participate as volunteer observers for the National Weather Service, the National Hurricane Center, and numerous local TV and radio stations.

14. How long has the company been in business?

In business since 1963, Davis Instruments opened up the home weather station market back in 1989. The competition has only appeared within the last few years. Our weather stations are manufactured right here in Hayward, California, and we have a full customer service and support staff. Most of the competing weather stations are made overseas, and it can be difficult (if not next to impossible) to get any kind of customer service or aftermarket support.

Vantage PRO®

Wireless Weather Station

With instant updates and multiple alarm settings, our new Vantage Pro® stations let you keep an eye on critical weather conditions.

- **Barometric Pressure.** Currently and for each of the last 24 hours. Five-position trend arrow shows whether pressure is rising, falling, or stable.
- **Temperature.** Inside and outside temperature, currently and for each of the last 24 hours. High and low temperature alarms.
- **Humidity.** Inside and outside humidity, currently and for each of the last 24 hours. High and low humidity alarms.
- **Rain.** Rainfall for the last 15 minutes and the last 24 hours, days, months, and years. Flash flood and 24-hour rain alarms.
- **Rain Rate.** Currently and for each of the last 24 minutes. Rain rate alarm.
- **Rain Storm.** Rainfall for the last 24 storms, with beginning and ending dates for each storm. Rain storm warning and alarm.
- **Wind Speed.** Current wind speed. Average for the last ten minutes and each of the last 24 hours. High and average wind speed alarms.
- **Wind Direction.** Currently and for the last 24 hours, days, and months. Direction of high wind speed.
- **Wind Chill.** Current wind chill. Wind chill alarm.
- **Dew Point.** Currently and for each of the last 24 hours. High and low dew point alarms.
- **Heat Index.** Currently and for each of the last 24 hours. Heat index alarm.
- **Sunrise & Sunset.** Time of sunrise and sunset at your location—it even takes daylight savings time into account!
- **Highs & Lows.** For most weather variables, with time and/or date, for each of the last 24 hours, days, months, and years.
- **Optional Sensors.** For UV and solar radiation, evapotranspiration, soil moisture, and more.
- **On-screen graphing.** Graph current conditions, averages, or highs and lows for the last 24 hours, days, months, or years.
- **Your own local forecast.** Forecast icons show sun, part sun, clouds and rain, or snow. Check the scrolling ticker-tape for more details.

All this—and much more—in a station that's easy to set up and fun to use.

DAVIS
Davis Instruments
3465 Diablo Avenue, Hayward, CA 94545-2778

CHANGE SERVICE REQUESTED

PRESORTED
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